

Government of Jammu and Kashmir



Fifth Five Year Plan

(1974—79)

192

DEPARTMENT OF PLANNING & DEVELOPMENT

MARCH, 1974



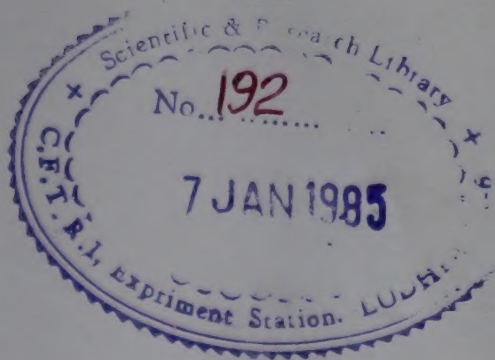
Fifth Five Year Plan

(1974-79)



Fifth Five Year Plan

(1974-79)



Contents

General

	Page No.
CHAPTER I	
Socio-Economic Situation	1
CHAPTER II	
The Fourth Plan Experience	9
CHAPTER III	
Objectives and Strategy of the Fifth Plan	17
CHAPTER IV	
Imbalances in Development	29
CHAPTER V	
Financial Resources for the Fifth Five Year Plan	43
General Statements (5th Five Year Plan):	
'A'.—Programme-wise Outlays	46
'B'.—Hilly, Specially Backward Areas & Kandi Development Sectorwise Outlays	47
'C'.—Physical Programmes—Targets & Achievements	48

Sectoral

CHAPTER VI	
Agriculture and Allied Programmes :	
1. Agriculture	49
2. Horticulture	55
3. Parks & Gardens	57
4. Minor Irrigation	65
5. Animal Husbandry	79
6. Sheep Husbandry	83
7. Dairying & Milk Supply	91
8. Forests	97
9. Soil Conservation	105
10. Command Area Development	109
11. Fisheries	111
12. Land Reforms	113
13. Co-operation	115
14. Panchayats, C. D. & N. E. S.	123

CHAPTER VII

Page No.

Irrigation and Power:

- | | |
|--------------------------------|-----|
| 1. Major and Medium Irrigation | 125 |
| 2. Flood Control | 130 |
| 3. Power | 153 |

CHAPTER VIII

Industry and Mining :

- | | |
|---------------------------------|-----|
| 1. Industry | |
| 2. Large and Medium Industries | 165 |
| 3. Village and Small Industries | 185 |
| 4. Mineral Development | 199 |

CHAPTER IX

Roads & Transport :

- | | |
|-------------------|-----|
| 1. Roads | 205 |
| 2. Road Transport | 227 |
| 3. Tourism | 229 |

CHAPTER X

Social Services :

- | | |
|--|-----|
| 1. General Education | 233 |
| Technical Education | 261 |
| 2. Health | 263 |
| 3. Urban Water Supply | 269 |
| 4. Rural Water Supply | 273 |
| 5. Housing and Urban Development | 283 |
| 6. Backward Classes and Social Welfare | 287 |
| 7. Labour Welfare and Craftsmen Training | 291 |

CHAPTER XI

Miscellaneous :

- | | |
|--|-----|
| 1. Statistics, Evaluation & Planning Machinery | 293 |
| 2. Information and Publicity | 297 |
| 3. Government Presses | 303 |
| 4. Weights & Measures | 305 |
| 5. Development of Ladakh and Backward Sections of Population | 307 |

Chapter I

Socio-Economic Situation

Geo-Physical Features

The State of Jammu and Kashmir is the northern-most State of the country. It is bounded in the north-east by China, in the north-west by Afganistan and in the west by Pakistan. The southern boundary is contiguous with the States of Punjab and Himachal-Pradesh. In view of its location, it has a vital strategic importance.

(2) The State extends over an area of 2,22,870 square kilometres and according to provisional estimates, the area on this side of the Line of Actual Control is 1,38,992 square kilometres. The village papers are, however, available for 34,179 square kilometres. An area of 20,837 square kilometres is under 'Forests' and is managed by the Forest Department. The remaining area, being covered by rugged mountains and barren lands, has not been cadastrally surveyed. A study of land use pattern between 1960-61 and 1967-68 reveals :— .

(a) Area under culturable waste has declined from 162 thousand hectares to 143 thousand hectares ;

(b) Net area sown has increased from 657 thousand hectares to 717 thousand hectares. Area sown more than once has increased from 153 thousand hectares to 157 thousand hectares ;

(c) Area of fallow land has gone down from 119 thousand hectares to 91 thousand hectares ;

(d) Area under pasture land increased from 121 thousand hectares to 128 thousand hectares ;

(e) Area under irrigation has recorded an increase from 275 thousand hectares to 279 thousand hectares. The net area sown constitutes 30% of the area according to the village papers. Area sown more than once forms 22% of the net area sown. Area under irrigation constitutes 40% of the net area sown.

(3) On an average, the annual rainfall of the State is 43" ranging between 45" in the valley, 53" in Jammu division and 2" in Ladakh district. The State enjoys a wide range of altitudinal variations, resulting in wide climatic variations. The temperature in some areas in Jammu division rises as high as 120°F. On the other hand, in Kashmir valley, the maximum temperature rarely goes above 95°F.

Demographic Features

(4) According to 1961 Census, the population of the State was 35.61 lakhs, which increased to 46.17 lakhs by 1971 and the decennial growth rate of population between 1961-71 thus works out to 29.65%.

(5) Assuming that the average rate of growth of population remains at 2.62% per annum (as reflected in 1971 Census), the population at the end of the Fourth Plan period is estimated to be 49.84 lakhs which is likely to be 56.67 lakhs at the end of the Fifth Plan period.

(6) The chief demographic features according to the population Census of 1971 are:—

(i) The rate of growth of population between 1961 and 1971 has been 29.65% as against 24.80% for the country. Urban areas have shown growth rate of 44.56% against 26.65 percent in the rural areas;

(ii) A distinct change in the rural-urban population ratio has occurred between 1961 and 1971. The percentage of population inhabiting rural areas of the State has declined from 83.34 in 1961 to 81.41 in 1971;

(iii) The ratio of males and females was 1000 : 882 in the State against 1000 : 920 for the country;

(iv) The level of literacy in the State was 18.58% whereas it was 29.85% at the National level.

(7) The trends indicated by 1971 Census are likely to prevail even at the end of the Fourth Plan period. In the field of education, however, the enrolment ratio of children in the age-group 6-11 is estimated to go up by 7% between 1969-70 and 1973-74.

(8) The total number of workers in the State in 1971 was 13.74 lakhs, giving a work participation rate of 29.76%. The corresponding number of workers in 1961 was, however, 15.23 lakhs. The fall in the working force in 1971 is mainly because of divergent concepts and definitions adopted in the two Censuses. In order to

achieve comparability, an attempt has been made to bring the working force for 1961 Census in conformity with the definitions adopted in 1971. The comparative picture is reflected below sector-wise:—

Sector	1961	1971	1973-74
	Lakh. No. (Estimated)	Lakh (Estimated) Nos.	
Agriculture ..	8.18	9.37	9.63
Livestock Forestry, Fishing, Orchards and allied activities. ..	0.31	0.67	0.78
Mining and Quarrying	Neg.	0.02	0.02
Manufacturing, processing and repairs and other house-hold industry	0.55	0.72	0.76
Construction ..	0.08	0.31	0.40
Trade and Commerce	0.03	0.63	0.71
Services and others	1.46	2.02	2.16
TOTAL	10.91	13.74	14.46

(9) According to these revised estimates, there has been an annual increase of 2.33% in working force between 1961 and 1971. In 1961, 74.98% workers were engaged in Agricultural pursuits as against 67.8% in 1971. In manufacturing, both in registered and unregistered sectors, there has been a marginal increase in labour force utilisation during inter-censal period. The number of workers in 'tertiary' sectors have, however, registered a significant increase. In construction, industry, 2.26% workers were engaged in 1971 as against 0.76% in 1961. Similarly, in 'Transport and Communications' the relative contribution to working force has gone up from 1.11% in 1961 to 3.19% in 1971. The number of workers in 'Services' sector has registered an annual increase of 3.5—between 1961 and 1971 and the percentage

contribution has increased from 13.3% in 1961 to 14.7% in 1971. The share of 'public administration' in this sector is fairly substantial. It will, therefore, be seen that there has occurred a marginal occupational shift but, on the whole, the economy of the State remains basically agricultural in character.

Economic Features

(10) With a view to give a purposeful direction to the economic development of the State, substantial investment has been made under the State Plans during the last two decades. The following table reveals the structure of public investment made in different Sectors under planned development from 1950-51 to 1972-73:

Sector	(Total investment (Rupees in crores)
Agriculture, C.D. & Cooperation	... 54.88
Irrigation and Power	... 85.88
Industry and Mining	... 21.17
Transport and communications	... 51.30
Social Services etc.	... 69.81

(11) As a consequence of this investment, the State income at 1955-56 prices has increased from Rs. 55.54 crores in 1950-51 to Rs. 122.74 crores in 1969-70 and Rs. 135.68 crores in 1972-73. The average annual rate of growth of the State income during the first four years of the Fourth Plan has been about 3.5%.

(12) Consequent upon planned investment during the last two decades, the structure of State income has also under-

gone a change which is indicated below;—

Sector	(At 1955-56 prices) (Rupees in Crores)		1972-73
	1968-69	1969-70	
Agriculture ..	45.88	48.03	48.71
Industry and Mining	24.97	25.49	27.05
Communication and Transport ..	9.43	9.62	10.00
Other Services ..	37.03	39.55	49.92
TOTAL ..	117.21	122.74	135.68

(13) Under the impact of substantial investment made during the last two decades in agricultural sector, as well as due to the technological and institutional changes that have occurred in this sector there has been a significant rise in the level of production of various commodities. The production of cereals estimated to be 98 lakh quintals in 1969-70 is likely to go upto 101 lakh quintals in 1973-74. The area under High Yielding Varieties is likely to go up by 146 thousand hectares during the Fourth Plan period. Similarly against 754 tonnes of improved seeds distributed in 1969-70 the achievement in 1973-74 is likely to be 1775 tonnes. The off-take of chemical fertilisers, which was 46.4 thousand quintals (NPK) in 1969-70 is likely to be 180 thousand quintals in 1973-74. Despite major change in the level of agricultural production and its pattern, the State continues to be deficit in foodgrains. Orchard- ing has, however, registered phenomenal growth over the recent years. The export of fruits (dry and fresh) has risen from 7.36 lakh quintals in 1969-70 to 15.50 lakh quintals in 1972-73. Keeping in view the State's potential for growth of this sector, it appears that the development of horticulture has to be a major plank in the strategy of economic development during the Fifth Plan period.

(14) The development of agricultural sector has also been facilitated by technological changes which have occurred

during the last twenty years. These changes have largely been exhibited, as discussed above, in the form of greater use of improved seeds, use of fertilisers, coupled with improvement in agricultural techniques and irrigation facilities. There has also been institutional changes in this Sector. The growth of peasant proprietorship, security of tenure and minimisation of inequalities in the land holdings after the induction of land reforms of 1950-51 have increased the receptivity of the farmer to accept improved agricultural practices.

(15) Extension of the cooperative activities in the sector particularly in the field of financing, has facilitated the adoption and absorption of the technological changes. According to the tentative estimates about 90% of the rural population in the valley and 40% in the Jammu province of the State has been covered by the Cooperative Movement. The progress of the Cooperative Credit Societies has, however, been spectacular in as much as the amount of loans advanced by them is likely to increase from Rs. 2.93 crores in 1969-70 to Rs. 8.64 crores in 1973-74.

(16) The State of Jammu and Kashmir is quite rich in forest resources. Nearly 95% of the total area in Kashmir Valley and 15.8% in Jammu region are under forests while in Ladakh it is only 0.75%. On per capita basis the average forest area in the State is placed at 0.50 hectares against the national average of 0.16 hectares. However, only about 40% of the forest area is suitable for commercial exploitation. The forests of the State constitute about 3% of the total area under forests in the country and the production of timber accounts for 6% of the national production. With a view to enhance the contribution from forest, policies aiming at the conservation and rational exploitation of existing resources have been adopted. Attempts are also being made to transfer the 'uncommercial forests' to 'commercial forests' through the creation of infra-structure essential for

the realisation of this objective. The Government has also formulated programme to nationalise the exploitation of forests by 1977 in Kashmir valley and by 1980 in Jammu region.

(17) Planned investments (outlay) in industrial sector of the State Economy have increased from Rs. 83.12 lakhs in the First Plan period to Rs. 992 lakhs (outlay) for the Fourth Plan period. Yet the required temperament for industrial development has not been built up and as a consequence the pace of industrialisation has remained extremely low. The contribution from this sector has been estimated at Rs. 27.05 crores, constituting only 19.93% of the State income in 1972-73. The number of registered factories has increased from 107 in 1962 to 210 in 1972 and the number of workers employed in these factories has recorded a corresponding increase from 5482 to 11779. The disquieting feature of the industrial activity in the State is relatively poor standing of the registered (organised) sector which contributes only 2.02 crores to the State income while contribution from the unregistered sector amounts to 24.84 crores. Not only is the total industrial activity in the State at a low ebb, but structurally it is dominated by the household industries thus underlining the industrial backwardness of the State. The industrial backwardness of the State is also shown by the very small percentage (0.117) of the total licenses issued under Industries (Development and Regulation) Act of 1951 by the Government of India during 1969-70. The relative inflexibility of the per capita advances from the scheduled commercial banks between Rs. 3.4 and Rs. 4.2 during 1961 and 1968 against substantial increase in the per capita deposits from Rs. 30.5 to Rs. 64.0 during the same period lends support to these observations. The main reasons for the low industrial activity of the State can be attributed to peculiar geographical location of the State, limited explorable natural resources, shortage of imported raw material, inadequate and expensive

transportation, inadequate and irregular power supply, absence of adequate central investment, poor technical know-how, absence of a viable entrepreneurial class and passive role of financial institutions causing shortage of capital. These issues lead to the irresistible conclusion that the State essentially has to act as an effective instrument for according a purposeful direction and leadership to hasten the pace of industrialisation of the economy. The enlargement of the public sector; expansion of the private sector, largely under the influence of incentives provided by the Government and limited participation by the Central Government in the public sector, have during the recent years succeeded in breaking the near stagnation and augurs well for the future industrial development of the State.

(18) The provision of infrastructure for accelerated pace of economic development of the State is a crucial factor. During the last two decades, substantial improvement has been made in this direction. The following table indicates the growth of infrastructure during the Fourth Plan period :

Indicator	Unit	1969-70	1973-74 (likely level of achievement)
Road length maintained by State P. W. D. ..	KMT	6631	7824
Number of vehicles (Buses and Trucks)		5056	6694 (1971-72)
<i>Electricity:</i>			
a) Installed capacity	MWs	40	83
b) Electricity Sold.	KMWH	166	219
c) Villages electrified	Nos	1080	1412
<i>Education:</i>			
a) Enrolment ratio 6-11 (age group) ..	percent		
Boys ..		90.00	93.00
Girls ..		41.00	51.00
Total ..		66.00	73.00
b) 11-14 age group	"	36.00	38.00
c) 14-17 -do- ..	"	20.00	24.00
d) Colleges ..	"	19.51	34.11
<i>Health and Family Planning :</i>			
a) Hospitals	Nos.	22	27
b) Dispensaries ..	"	576	672
c) Beds ..	"	4056	4864

(19) Another significant development in the economy of the state is the growing importance of tourism. The tourist traffic has increased from 0.74 lakhs in 1960-61 to 1.25 lakhs in 1972. As a result of this growth of tourist traffic and other aspects connected with tourist industry, there has occurred a substantial increase in its contribution to the development of the economy of the state.

Prices

(20) The emerging structure of the State income alongwith demographic structure that has evolved, has made the State economy more susceptible to inflationary pressure. The inflationary trend is further supported by the weaker multiplier effect due to the leakages from the economy in the form of growing expenditure on consumption goods imported from other parts of the country. The consumer price index for industrial workers for Srinagar city with base 1950-100 has increased to 218 in Nov. 1973, while the consumer price index for Agricultural labourers for the State with the same base has increased to 201 in March 1973. The State Government has adopted from time to time measures to hold the price line. The measures are classified as (a) public distribution through Government agencies and Cooperatives (b) price control measures including creation of buffer stock. These measures have had their impact on curbing inflationary tendencies. However, the developing economy essentially has to experience a rise in price due to inherent factors. Thus apart from rationalisation of investment pattern there is a need to minimise irrationalities in the commodity distribution sector.

Poverty level

(21) Since poverty level is defined in terms of minimum level of consumption and since the inflationary pressure in the State is significant, the poverty level of current prices have about Rs. 50 per month, which means that per capita expenditure per annum of Rs. 600 is required to provide basic minimum needs.

Keeping in view the trends in occupational pattern, the income structure of the State, the requirement of a cold climate, the poverty level in the state is much higher than All India average of 40%.

(22) In view of peculiar topography and agroclimatic conditions, about 78% of cultivated area is sown only once in a year. The pressure of population on land is very heavy and in hilly and drought prone areas, productivity is very low. According to very high estimates the total number of under-employed in agriculture is 3.73 lakh (cultivators) who are under-employed, 3.38 lakh landless agricultural workers who are un-employed, during the off-season 0.35 lakhs.

(23) The real problem of unemployment in the State is that of educated unemployed. With the increase in facilities for education, poor industrial base and lack of avenues of employment in other sectors the pressure of generating and providing employment by the public sector is mounting and the problem has been a cause of serious concern to the State Government because of social tensions created in by it. According to a rough survey conducted in 1970 there were over 15,000 matriculates and graduates unemployed in the State. With the entry of four to five thousand educated persons in the employment market every year, the number is increasing too fast. Assuming that the population continues to grow at 2.62% (as indicated in 1971 Census) and work participation rate and the level of employment remained at constant level during the Fifth Plan period, additional jobs shall have to be provided at the rate of 36 thousand annually ending 1973-74 and at 42 thousand per annum during the Fifth Plan period.

(24) Employment has been assigned a high priority in our developmental strategy and generation of employment opportunities has been recognised as an objective of planned development. The following

steps have been taken to relieve the pressure of unemployment :

- (i) A number of surveys and investigations have been taken in hand to determine irrigation and power potential and as a result, almost all engineering graduates and diploma holders on the civil side and electrical side have been provided jobs.
- (ii) A programme of self-employment for the educated youth in small scale industries by way of providing technical know-how and necessary credit facilities have been initiated. The response is quite favourable.
- (iii) A programme of providing employment to educated unemployed persons in rural areas under 'self-employment programme' has also been taken in hand.
- (iv) Crash schemes providing employment in rural areas to 2500 people in each district for 4 to 6 lean months in a year have also been taken up. The S.F.D.A. project has been launched in Anantnag, Jammu and Kathua districts and the MFAL project in the districts of Poonch-Rajouri and Baramulla.
- (v) A large number of employment programmes are being implemented in the State during the current year creating jobs for 10,000 educated youth under Half-A-Million-Jobs Programme of the Union Government.

Social Changes

(25) All these developments have brought about a significant change in the structure of society. The gulf between desperate social groups which fitted into the inherited social stratification, has now been minimised. Formerly, power was the

monopoly of the landed gentry of the upper classes and between them and others there was a great unbridged abyss. Social climbing and falling occurred most infrequently and with difficulty. The occupational role a person performed was a function of family origin. Some of it still persists, but under the impact of the economic changes and enormous levelling process is in operation, castism, although persistent, has lost its original rigidity; joint family system has been eroded significantly. Education is more equally distributed and this has increased the number of channels for movement between social classes in both directions. Avenues of employment are varied and are open to all without distinction of sex, caste and creed and as a consequence social coherence has been strengthened and social rigidities weakened. There is today greater social mix between urban and rural societies than at any time in the past. Consequently the cost of social mobility has diminished.

(28) Despite the multi-dimensional socio-economic changes that have occurred in the State, the gains of the developmental

activities have not uniformly been distributed among the different regions of the State. Consequently, the economic distance between the Centres of development and the regions of low developmental activities has increased. Since, the gains of socio-economic changes have not percolated particularly to the regions having difficult terrain and other constraints, there socio-economic setting largely presents a picture of stragant societies. These regions of low developmental activities with population of roughly 15 lakhs people have been identified as Gool-Gulagbgarh, Dudu-Basantgarh, rural area of Poonch, Rajouri and Doda districts, Bani area of Kathua district, in Jammu region and the whole of District Ladakh, Tehsil Karnah, Gurez and other higher reaches like Matchhil in Kashmir province. The need for urgent action for reducing these disparities has been realised and one of the main thrusts during the Fifth Plan will be in the direction of speedy development of these areas. Detailed schemes have already been drawn up for this purpose.

Chapter II

The Fourth Plan Experience

With the end of the 3rd Five Year Plan in 1966, there was a gap of 3 years before the 4th Plan began in 1969-70. The years 1966 to 1969 were annual plans formulated to meet a contingent situation. The reasons for this break in the progress of 5 years plans are too well known to be documented here, but the aggression in 1965 followed by severe drought and the resultant recession forms the scenario for the 4th five year plan. The priorities reflected in the 4th five year plan also were in the context of this scenario. While the country was facing a serious food situation, it was the endeavour of the State to aim at self-sufficiency in the production of food-grains. Infrastructural facilities such as power, communication and expansion of irrigation were also high priorities in the 4th Plan. An average rate of growth of 6% was formulated for the economy as a whole.

The 4th Plan outlay for Jammu and Kashmir was fixed at Rs. 158.40 crores and the intersectoral allocations reflected the emphasis of various sectors. The 4th plan outlay for agriculture production as a whole was Rs. 30.15 crores, for power Rs. 40.09 crores, for communication Rs. 20.91 crores, and for Industrial development Rs. 9.92 crores. As can be seen from this distribution the allocations for

power, agriculture and communication were the highest. The experience in the implementation of the plan in the first 3 years has varied from sector to sector.

The production of rice and maize which increased to the 4th Plan target in the very first year of the 4th plan subsequently fell because of drought for 2 successive years and consequently there have been short-falls in expenditure too. The total food production during 1973-74 is estimated at 10.12 lakhs tonnes as against 11.00 lakh tonnes which was the original 4th plan targets. This indicates that it has not been possible to completely iron out the effects of weather and other natural factors to give a stable level of food-grains production.

In the power sector expenditure in the first 3 years of the plan was considerably lower than the outlays. Against an allocation of 7 crores in the first year, only Rs. 6.61 crores was the expenditure incurred. In the 2nd year, against an allocation of Rs. 8.42 crores the position improved considerably and Rs. 8.24 crores was the expenditure involved. Much time was spent in preparation of the detailed projects and drawing up of designs. In 1971-72 the position of expenditure improved substantially and against an allo-

cation of Rs. 7.50 crores, the expenditure incurred was Rs.8.99 crores. During 1972-73 expenditure was about Rs. 1230 lacs against the outlay of Rs. 987 lacs. During 1973-74 the expenditure is likely to be of the order of 15 crores. The first stage of the Lower Jehlum Project which was to be completed by the end of 4th Plan period, will not be achieved due to delay in supply of equipment by the Bharat Heavy Electricals. The Chenani Project has been commissioned even though slightly belatedly and the availability of power is likely to rise to about 83 MWs.

In the Industries Sector against an allocation of Rs. 1.74 crores in 1969-70, the expenditure recorded was only 1.00 crore. In the second year of the Plan against an allocation of Rs. 2.05 crores an expenditure of Rs. 1.32 crores was recorded. The allocation was reduced slightly in 1971-72 keeping in view the capacity of Industrial sector to absorb funds and an allocation of Rs. 1.43 crores was made and the expenditure touched the level. During 1972-73 the allocation was increased to Rs. 176 lacs and the anticipated expenditure has exceeded the outlay and for 1973-74 the revised outlay of Rs. 193.85 lacs is expected to be utilized fully. Progress in Industry in the 4th plan, has been mainly in the small scale sector and the number of small scale units in the State have increased by 800 units by the end of the 4th plan period. There were serious set backs in achieving the targets in large and medium scale industries sector. This was due to the lack of detailed investigations. The proposal to set up Rayon grade pulp project ran into difficulties at the project appraisal stage. Similarly the proposal to set up a Cement Factory at Basoli was delayed because of the requirement of detailed investigations, including the assessment of limestone deposits in Saira and the quali-

tative analysis of these deposits.

In the field of irrigation, the expenditure on minor irrigation has been consistently high as also in major and medium irrigation schemes. In the minor irrigation sector the emphasis shifted from the coverage of new areas to the stabilization of the existing minor irrigation net work especially in the Vally. This shift in emphasis was necessitated by the drought situation prevailing in the State in 1970-71 and 1971-72 as a result of which, the energies of the organisation were diverted towards the execution of Contingency Plans to maximise the use of available irrigation water. In the major and medium irrigation sector, the notable feature is the likely completion of the Tawi Lift Project by the end of the 4th Plan.

There was considerable improvement in the organisational structure of the development departments in the 4th plan period which is reflected in the pace of expenditure during the latter part of plan period. While at the end of the 3rd plan, substantial short falls in expenditure were recorded and shortfalls have been consistently occurring in the 3 annual plans also, the 4th plan began with a modest short fall in the first 2 years, but went on to heavy expenditures subsequently. The position is reflected by the fact that in 1969-70 against an allocation of Rs. 23.71 crores an amount of Rs. 21.56 crores was the expenditure incurred. In 1970-71 expenditure was Rs. 28.59 crores against Rs. 29.65 crores while in 1971-72 expenditure recorded was Rs. 31.05 crores against an allocation of Rs. 30.79.

In all priority sectors the expenditure is likely to exceed outlays for the IV Plan as a whole. This is also reflected in the pattern of outlays from year to year allocated to the various sectors. Against

the original outlay of Rs. 158.40 crores the ultimate size of the 4th plan is likely to be of the order of Rs. 162 crores. The major areas in which the plan allocations have been higher than the original outlay is major and medium irrigation 12%, power 289%, Roads 104%, General Education 135%, Water Supply 129%, Craftsman training and Labour Welfare 116%.

While assumptions that went into the fixing of priorities for the 4th Five Year Plan were derived from the experience of the years 1966 to 1969, and in the context of the State of the economy at that stage, there was a substantial change in the State of the economy, after the first 3 years of the 4th plan. Three distinct factors emerged in the State, as a result. The first was that with the high tempo of investments in the country as a whole, there were persistent shortages of construction materials especially of Cement, Iron and Steel which slowed down the tempo of development in the construction sectors subsequently. The 2nd factor was the continued drought situation prevailing in the Valley and some other parts of the state over a period of almost 3 years. The 3rd factor was the problem of unemployment among educated and technically qualified personnel. While the effect of the first factor on the development of power irrigation and communications was severe, the situation eased to some extent in 1972-73. However, the situation in the availability of iron and steel was not completely satisfactory and the backlog of construction in the past years could not be entirely made up. To meet this situation the stream-lining of the allocation procedure of steel and iron at the central level was of considerable help. In the State also, some organisational changes involving the decentralisation of

procurement of materials helped procurement of material speedily.

The drought situation was a severe inhibiting factor in the development of agriculture. The situation created distortions, already mentioned, in the 4th plan programme of action in the minor irrigation sector. Specifically it became necessary to install a large number of pump sets in the Valley and to regulate the flow of water for optimum use. A considerable area hit by drought was diverted from paddy production to maize and in the chronically unirrigated areas this crop was also adversely affected. The drought also was one of the contributing factors to the heavy over-dues position of cooperative institutions as a result of which the line of credit to the farmer became blocked. These built up substantial disincentives to the spread of high yielding varieties and in the off-take of fertilizers. In fact the level of off-take of fertilizers, fell below the 1967-68 level in the first 3 years of the plan.

Increased outlays within the State Sector supplemented by centrally sponsored schemes were provided for the surveys and investigations of power, irrigation and Roads. Emphasis was shifted to the more employment intensive sectors such as Small Scale Industries, the streamlining of public sector undertakings and job oriented special programmes. Consequently organisational changes were also made and a separate Directorate of Employment was created with the task of administering self employment programmes, the expansion of training programmes, for the educated and to carrying out project studies.

The State Government undertook a detailed re-examination of the performance

of various sectors which resulted in change of some policies and redefinition of plan objectives. Solution of the emerging problem of unemployment was assigned a high priority. Greater emphasis was laid on the expansion of power generation and transmission and enhanced allocations were made for the power sector in 1972-73 and 1973-74. This was done to provide power for accelerating the pace of development in industry and agriculture. Consequent upon this, organisational changes became necessary. A State Electricity Board was formed and a high powered committee was set up in the State with the task of reviewing and speeding up the decision making process for the execution of power programmes. Separate Organisations were created for rural electrification, construction and survey and investigation and it became possible for the first time to tap the resources of the Rural Electrification Corporation which eased the pressure on the State Plan. In reappraising the performance of the Industries Sector, the urgent need for building up a cadre of Industrial Managers was recognised for the more efficient functioning of the public sector undertakings. To guard against the stagnation which had set in our public sector undertakings, preparation of Rolling Plans was initiated and an Industrial Development Committee was set up to review and speed up the decision making process in the preparation of projects and their execution. A considerable shift in emphasis in favour of Handicrafts also took place and policy was laid down to increase the actual flow of returns to artisans and to remove the role of the middleman, as far as possible. The consequent structural changes made in this connection resulted in the expansion of the activities of the Handicrafts (S & E) Corporation and the setting up of a separate Directorate of Handicrafts. In addition, a high powered

Committee was set up for quickening decision making and review.

The concentration of effort in the major and medium irrigation sector was focused on the speedy completion of the high priority projects such as the Tawi Lift Scheme and the remodelling of the Ranbir Canal and consequent slowing down of the execution of a number of lower priority schemes.

Among inputs, short term credit for production is vital to the growth of agricultural production. Due to a number of reasons the overdues with the Cooperative Societies had piled up choking the line of credit from the Reserve Bank of India. Measures were, therefore, taken to strengthen the Cooperative structure by administrative improvements and assistance to Cooperative Banks to provide adequate cover for bad and doubtful debts. Overdues with the Cooperative Societies on account of short term credit were converted into long term loan repayable in ten years. This has enabled the line of credit from the RBI being reopened. As a result the supply of short term credit improved from Rs. 1.88 crores in 1971-72 to Rs. 2.80 crores in 1972-73.

For many years supply of short term credit has been linked with procurement of foodgrains like rice and wheat. This was discovered to be a retarding factor in the utilization of credit by the farmer as the procurement prices were lower than the prices in the neighbouring States and the open market. It was, therefore, decided to delink supply of short-term credit with procurement of food-grains and prices have also been increased to a level comparable to that of the neighbouring States.

Some years back a ban was imposed on the utilisation of paddy growing lands to crops other than paddy. This was hindrance in the way of optimum utilisation of such lands as could give much higher returns by growing of fruits and other cash crops. This restriction was removed so that efficient use of land otherwise not ideally suited for cereal production like rice and wheat is made. This has helped areas along the hilly-slopes to come under Horticulture with much higher economic advantages to the farmer than was the case hitherto.

The land owned by absentee land-lords, generally under lease to tenants, are not so well cared for as lands owned by the tillers themselves. The land-owners are not interested in improvements on the land and the tenants are also not able to make investments on the land due to their poor economic condition. With the passing of the Jammu and Kashmir Agrarian Reforms Act ownership will vest in the actual tiller of the soil and all remnants of intermediary interest would by and large be removed. These reforms will spur the farmer to make greater investments and efficient utilisation of land.

The phenomenal rises in the exports of fruits have posed the problem of efficient marketing of horticultural produce especially apples. With the passage of time this problem will gain in dimension and marketing of apples was, therefore, taken up as a separate problem and studies were made in some depth. As a result thereof it was decided to arrange direct sales of fruit at such important markets as Bombay, Madras and Bangalore besides Delhi where shops and a cold storage plant were built. Production of large quantities of fruit has also resulted in the accumulation of sizeable culled stock which is not nor-

mally marketable. Setting up of two units for apple juice and apple products, one in the Cooperative sector and the other in private sector, is in hand. Problems of the disposal of horticulture produce especially apples by State marketing or through processing will continue to grow in dimension and will have a very important place in our fruit development programme. A separate Directorate of Horticulture (Marketing and Planning) was created in the Horticulture Department to look after these problems and also undertake studies for diversification of horticultural produce.

The live-stock population in the State is more or less equal to the human population, yet the availability of milk, mutton and wool is extremely low. Large numbers are a great strain on the grazing areas and pastures. Schemes of cattle and sheep development can make progress if the grass and fodder resources are developed appreciably. Research on grasses and fodders in the temperate areas has been inadequate. Experience of countries like New Zealand and parts of Europe in this respect would be of great benefit. Meanwhile the technique of applying chemical fertilizers, seeds and weedicides by air or by ground operations would continue in the 5th plan.

The faster pace of upgrading local cattle has been retarded by the difficulty in procurement of good breeding stock. In the case of sheep the problem is less severe and the progress has been more satisfactory.

Poultry production has picked up after years of stagnation and deceleration. Marketing of eggs and birds from the poultry keepers and supply of balanced feed are important for the success of the programme. The manufacture of feed has now

been taken up by the State Agro Industries Corporation.

There has been shortage of technically qualified personnel in this sector. This shortage is being made up by training adequate number of boys.

The percentage of literacy in the State has gone up to 18.6 as per 1971 census as against 11 of 1961 census. As elsewhere in the country the system of education has not produced satisfactory results and has created problems of unemployment with consequent unrest amongst the youth. A new direction to the system of education was considered to be urgently called for and a high level committee was set up to go into this question. The Educational system is proposed to be reshaped during 5th Plan, according to the recommendations made by this Committee. Greater emphasis will be laid on work experience and vocationalisation of education, development of science and technology, physical education and youth welfare programmes.

It has been found that even though facilities are created for the backward areas the children are not attracted to schools because of socio-economic conditions. It is, therefore, necessary that adequate incentives are provided to such children to avail to the educational facilities.

The position in respect of health as compared to the norms fixed at the national level is happier in the State. These norms, however, are not suitable for the State as the density of population in mountainous and difficult areas is very low. Considerations of area is more relevant for a State like ours than the population. Out of 77 primary health centres 16 are without

suitable buildings.

Roads have a special importance in the State where the only means of transport is by motor-vehicles. For the first time Jammu city has been connected with the Railway system since the partition of the country. The Ministry of Railways have in hand the extension of this railway-line to Udhampur town on the Jammu-Srinagar National Highway. It is hoped that the Railway-line would be extended to the Valley in course of time. The absence of Railway-link to the Valley and other parts of the city is a serious bottle-neck in the Industrial Development of the State. The Transport system within the Valley is proposed to be improved by making the river Jehlum navigable for mechanised craft. The survey for internal railway in the valley has been completed and when the power supply position improves it would be possible to have the railway in the Valley to be eventually connected with the railway system in the country.

In its attempt to foster rapid economic and social development, the State has to surmount a number of impediments. The prominent amongst these are land locked situation and mountains terrain. The factor of these internal disabilities has been aggravated by the State's proximity to closed frontiers. Sizeable areas are cradled inside the lofty mountains with the result that such areas continue even now to be more or less closed economics. Without proper development of communications these areas would continue to be isolally socially, economically and culturally. While the plain areas in the Valley and Jammu regions and the hilly areas which could be reached easily and connected by roads, the progress has been relatively faster the other areas have remained extremely backward. In order to

remove the imbalance in development Government have identified specially backward areas and sizeable investments are proposed to be made to improve the economy of these areas. Of these specially backward areas Ladakh has a huge area with lowest density of population in the country. The District is the largest in the State and perhaps in the country as well. This is now connected by a trunk road and link roads are being provided gradually as also roads to interior areas.

Other specially backward areas can be developed by building up proper communication facilities, infrastructure and social amenities.

Health and nutrition standards are extremely low in these areas and these have a daneful effect on the productivity of the people and diseases like T. B., Intestinal ailments, Malaria etc. and andemic. Motivation for change is also retarded by the very low level of literacy.

Chapter III

Objectives And Strategy Of The Fifth Plan

The basic approach to the socio-economic development of the State, during the Fifth Five Year Plan, is to adopt an investment pattern which will ensure a significant growth so as to bridge the gap between per capita income in the State and the per capita income at the national level, to generate adequate job opportunities so as to provide gainful employment to all those who are un-employed and also to those who are under-employed during the major portion of the year to erradicate abject poverty amongst the poorest groups of population and also to remove intra-state disparities in the economic and social development. Along-with these efforts will be made to achieve price stability to the extent possible.

Economic Growth

2. Jammu and Kashmir State is one of the poorest States in the country. Its per capita income is amongst the lowest. According to tentative estimates, the per capita income in the State during 1970-71 at 1955-56 prices was Rs. 301 against the All India figure of Rs. 347 (at 1961 prices). Per capita income in most of the neighbouring States is, by and large, higher than the per capita income in the State.

3. At the national level the approach during the 5th plan will be to achieve an annual growth rate of 5.5%. Since, as stated earlier, per capita income in the

State is very low as compared with the all India figure, the approach during the 5h Plan will be to achieve an annual growth rate of about 7 to 8% so as to enable the State economy catch up with National level as early as possible. Allowing for an annual increase of about 2.6% per annum in the population, the per capita income is, therefore, expected to increase by an annual rate of about 5%.

Unemployment and Under-employment

4. Sizeable unemployment especially among the educated and wide-spread and under-employed among all are the two serious problems facing the State. Therefore no precise estimates are available for unemployment and under-employment nevertheless an exercise has been made to arrive at a rough approximation in respect of both.

5. According to 1971 census, the work participation rate is 29.7% in the State (52.5% in case of males and 3.9% in case of females). This gives a total population of 13.7 lakhs workers in the State. Of these about 8.30 lakh are cultivators and landless agricultural labourers. Calculating on the basis of 2.6% annual growth of population the increase in the working force connected with agriculture alone will be of the order of 25 thousand per year if only the present level of employment is to be maintained. Actual number will be higher in case improvement in the

of hardship to the people. There are of course, no fixed norms as to how much existing level of employment is considered. Again, the marginal productivity of labour, especially in the agriculture sector, is very low. This is because of the fact that the sector suffers from acute under-employment. According to a very rough estimate about 3.73 lakh workers in this sector are under-employed. With the growth in population the number of under-employment will grow further at a much faster rate. In order to provide gainful jobs to these increasing numbers, a diversification in the economy shall have to be brought about.

6. According to another estimate, about 15 thousand educated persons (matric and above), 9 thousand in the rural areas and about 6 thousand in the urban areas were un-employed during 1970. Some of these persons are likely to have been employed during the current plan. The magnitude of the problem will not, however, change because 3 to 4 thousand additional persons enter employment market every year. Attempts will be made during the 5th Plan to create sufficient employment potential by accelerating investment in the productive sectors and also through self-employment programmes.

Development of specially backward pockets and Backward Groups of population.

7. In spite of substantial developmental investments having been made in the State during the previous plans, some areas have remained un-touched, or inadequately benefitted by this process. There are some pockets like Gurez, Karnah, Gool Gulab-Garh, Bani etc. which have not received benefits of economic development to the desired extent. This has, besides other reasons, been due to making investment in areas where it was easier to utilise the existing potentialities. This was

also due to our efforts at the development of basic infrastructure like power, irrigation and roads. Because of the very nature of these investments, benefits could not be equally spread over all the areas. Most of the specially backward areas are cut off from the main markets and lack of necessary socio-economic infrastructure for development. In most cases this is also due to lack of detailed technical and other data necessary for the identification of the problems and determination of the potentialities. The approach in the 5th Plan will, therefore, be to adopt such investment pattern so as to generate economic development in these areas at faster rate than the development in the other parts of the State. This will be only a method to remove the intra-regional variations in the economic development in the State.

Prices

Price rise is not a new phenomenon in the country. Prices have been rising for a very long time. This rise has, however, become more pronounced during the recent years.

Some price rise in a developing economy is very much inherent in the situation itself. In fact, a mild doze of price increase in a growing economy is inevitable and beneficial as it provides a propelling force for new investments. In a region like Jammu and Kashmir State where significant investments are being made on capital formation like roads, irrigation and power generation which involve long gestation period and also where large scale expenditure is being incurred in providing social amenities like education, health, drinking water supply etc., some price rise is bound to take place. This rise has, however, to be 'mild' to avoid being a source rise is within limits under the situation. Some economists are of the view that 2-3 per cent annual increase in prices is normal. The prices have, however, been rising at a much higher rate. The cost of

living index for the industrial workers in Srinagar city has risen from 108 during 1962 (with 1960 as base) to 184 during 1972. The rise has been more steep during the recent years. Anyhow, rise in prices is an all India phenomenon and for most of the essential commodities the State depends on the imports from other places in the country. Hence rise in prices in other parts of the country causes a corresponding rise in prices in the State. Many a time, however, the price rise in the State is more than the increase at the source and this is basically due to the imperfections of the local market.

There is another aspect of this problem. It has been the experience of our economy that the price rise has not been uniform. Prices of processed goods including consumer goods have been rising at a faster rate than the prices of raw materials especially agricultural goods. This has not only resulted in hardships for the poorer sections of the society but also has led to sectoral imbalances and more specifically adverse balance of trade for agriculture *vis-a-vis* other sectors. Moreover prices of essential raw materials like cement, iron etc. required for the construction of infrastructure have been rising. This has been making the investments costlier and delaying the completion of the projects and thereby disturbing priorities. The efforts to be made in this direction shall have to be manifold. Availability of essential commodities shall have to be ensured through increasing local production and imports from other parts of the country. Distribution will also have to be organised. This will not only mean regulating the existing market mechanism in order to reduce its potential for exploiting the consumer but also to increase public trading activity. Large scale investments in the production of consumer goods will require to be made in properly thought out pre-determined directions. This implies that profit will not be the sole criterion for investment. In order, besides, to ensure reasonable terms of trade to agricul-

ture as well as to other primary sectors a more detailed and rational price policy shall be evolved.

With the increasing tempo of economic development, the wage component of the total State income is going to increase at a fairly rapid rate. Wages form a significant part of the total value of the produce, and they have a tendency to rise as and when there is a rise in prices. Any effective price policy cannot, therefore, be evolved unless there is an equally effective wage policy. A comprehensive policy for prices, wages and income in general shall be adopted.

Fifth Plan Outlay

To achieve the growth rate of 5% per annum in the per capita income 7.5% growth rate in the State economy as a whole, outlay of Rs. 336 crores during the 5th Plan, is being proposed. This outlay will have necessary not only to achieve this targetted rate but also make a heavier investment in the sectors like power, irrigation, roads, drinking water facilities and some of the most important social services like Education and Health.

The main thrust in the Fifth Plan, will be on the development of key productive sectors like Agriculture and Small Scale Industries including Handicrafts with a view to ensuring an annual growth rate of 7 to 8%, building up the basic infrastructure like power, irrigation and roads to an adequate level, generate enough employment numbers so that unemployment among the educated and the technically trained youth ceases to be serious problem and also to reduce under employment especially under the Agriculture sector, to introduce special programmes for the development of backward pockets and also backward groups of population so as to minimise the economic gap which exists at present between various regions, pockets and population groups. In order, however, to ensure the targetted growth of economy and dispersal of socio-economic

gains an integrated programme of investment in priority sectors and specially backward areas will have to be devised. The approach to the development in the priority sector is as under:—

Agriculture

The agriculture sector, in the State is by and large a single crop economy. In order to make this sector more productive, it is necessary that ways and means are found to make more intensive use of the net area sown by evolving suitable crop patterns and ensuring better management of water, as also soil conservation of holdings.

The National Council of Applied Economic Research have estimated that at least 10,000 hectares of culturable waste land out of a total of 1.57 lakh hectares (including fallows other than current fallows) can be reclaimed. During the 5th Plan the approach will be to develop this land and bring it under, plough.

Increased food production will continue to be the main plank in the development strategy in agriculture sector. 80 per cent of the area sown is under cereals. The production of foodgrains has shown a considerable improvement during the last decade. There has been a breakthrough in the production of rice and maize. The yield rates of these two crops have gone up considerably and are at present amongst the highest in the country. The yield rate of wheat has however not shown signs of significant improvement. The implementation of the programme of cultivating wheat in the rice belt of Kashmir region where about 24 thousand hectares of land was brought under high yielding varieties seed of wheat during 1972-73 has given quite encouraging results. Efforts will, however, be made to develop early maturing varieties of wheat for temperate areas so that enough time is available for the preparation of land for the main raddy crop. Research on tem-

perate agriculture will be intensified with the setting up of the Agriculture University.

Even though some headway has been made in the use of chemical fertilizers and modern methods of cultivation, a majority of cultivators is still hesitant to accept the shift. Efforts will be made to defuse technical knowledge and the programmes of field demonstrations will be intensified manifold.

The State Government have recently removed restrictions on the conversion of paddy lands. The intension is to enable the cultivators to put the land to its optimum use and have the maximum income from this land in case paddy is not the best crop for that type of land. The main considerations would be to obtain as high returns from intensity in land-use as possible ensuring, however, that the production of paddy and other food crops is also stepped up as much as possible preferably by greater use of fertilizers, pesticides, mechanisation etc. Wherever there is a choice between food production and production of cash crops i.e. wherever economic gains are equal reference will be given to food production. In the field of food production our objective will be to raise the likely level of annual production of 10.12 lakh tonnes by the end of the Fourth Plan to at least 14 lakh tonnes by the end of Fifth Plan viz. about 5% annual increase in this sector. This will wipe out the imports. Similarly the annual level of production of pulses is targetted to rise from 30 thousand tonnes (the likely level by the end of Fourth Plan) to 50 thousand tonnes by the end of Fifth Plan. In respect of oil seeds the production is targetted to increase from 15 thousand tonnes (the level likely to be reached by the end of the Fourth Plan) to 35 thousand tonnes by the end of Fifth Plan.

The pattern of distribution of land in the State is such that not only ownership holdings are very small but they consist of

large number of fragments. According to a sample survey recently conducted in the areas where consolidation of holdings with six or more fragments (before consolidation) is about 45%. Even those holdings which have fragments more than 15 constitute about 8% of the total holdings. This factor, introducing another constraint in the management of land, is also responsible for low productivity. The land reforms recently introduced will solve this problem to some extent. To derive full benefits of the reforms, however, an active programme of consolidation of holdings coupled with other programmes of land development shall be launched. These programmes besides leading to better management and increase in the productivity will help generating large scale employment opportunities in the rural areas.

About 90 per cent of the village population is dependent on agriculture for its livelihood. This is one of the factors responsible for the existing large scale under employment and therefore, very low standard of living. The main thrust of our programmes in this sector therefore shall be in the direction of reducing pressure on cultivation by development of subsidiary occupations like sheep breeding dairying and duck and poultry keeping and production of vegetables. Development of grass lands and fodder at a faster pace assumes great significance in this context.

Horticulture

Fruit production has recorded phenomenal increase during the last few years and the results of the efforts put in this direction since mid sixties will be available by the beginning of the Fifth Plan. The estimated level of annual production of fruit by the end of Fourth Plan will be about 2.2 lakh tonnes and out of this quantity about 65% will be sold outside the State. While on the one hand, increased production has ensured the desirable dispersal of incomes on the other hand, it

has also created a problem of marketing. Our strategy in this sector would, therefore, aim at improving the marketing of horticulture produce. This will be ensured by introducing a vigorous system of grading and diversification of markets. Some action in regard to the latter has already been initiated. Any significant beginning in regard to the formers is, however, still to be made.

Introduction of grading would naturally result in large accumulation of culls, utilisation whereof, for processing, will be assigned a high priority. Our approach in setting up processing units for the culled stock of fruit will be based on purely economic and technical consideration and therefore, it will be desirable to increase the establishment of processing units in, Public co-operative, joint and private sector. The fruit processing industry in the State at present suffers from certain Handicaps. The prices of raw material imported from outside the State (like sugar and tin) are high and the excise duties on the processed fruits are very heavy. Because of these difficulties, it may not be possible for new fruit processing units to compete the units already established outside the State. Certain subsidies will, therefore, be provided to the new unit in the initial stages but these subsidies will be gradually withdrawn after the new units are able to stand on their own legs.

Expansion of production of dry fruits like walnuts holds out good promise especially as the marketing is not a major problem. Some work has been in progress to evolve late flowering varieties of almonds and quick maturing varieties of walnuts. The work will be intensified and brought to a successful conclusion to cut down the element of uncertainty due to vagaries of weather.

The packing of fruits has been posing a very serious problem. Necessary research with respect to the substitution of wooden packing material will be taken up and

cheaper and modern packing evolved.

✓Vegetables

Demand for vegetables has been rapidly growing because of improvements in the standard of living of the local population and the needs of the army. At present large quantities of vegetables are imported during the off season from outside the State to meet this demand. There are besides alternating period of scarcity and relative abundance in the temperate and sub-tropical regions of the State. A complementary development of vegetable production in different climatic regions to meet the growing need of each other would be an added reason for large scale expansion of this sector. The temperate areas of the State, besides, enjoy the great climatic advantage of producing vegetables at a time when the rest of the country is badly in need of these. This advantage will be fully exploited during the 5th Plan period.

The State is now poised for undertaking the production of more sophisticated vegetables like mushrooms of various kinds and asparagus etc. which have almost unlimited market. Alongwith increased production of these vegetables their marketing will be organised on a sound footing so that the present large fluctuations in demand and prices are eliminated.

A base for vegetable and flower seed industry is already laid in the State. For want of proper technical know-how this industry, which has tremendous potential, programmes for production of breeders-seed introduction of hybrid seed varieties a more rigorous quality control and efficient marketing system will be devised and implemented during the 5th Plan period. ?

Forests

Forests are the most important renewable resource of the State. Of a total area of 20.9 thousand sq. kms under the fores-

ts, only 8.6 thousand sq. kms. are commercial. The main reason for such a large forest area being un-commercial is the lack of proper communications. The prescribed annual yield of timber from the commercial forests is 337.5 lakh cft. but the annual extraction (1970-71) is in the neighbourhood of 149 lakh cft. There is, as such, a large gap between the prescribed yield and the level of extraction. Even the level of prescribed yield can improve, if the improved techniques of extraction are applied to forest operations. During the Fifth Plan attempts will, be made to intensify the extraction in the commercial forests by introduction of large scale mechanization and building up of a network of forest roads.

Apart from the conservation of woods, the objective of forest management will include increased production of fodder, and development of the fast degenerating Alpine pastures.

The State Government have decided to nationalise all forests in Kashmir Division by 1977 and Jammu Divison by 1980. The Departmental Lumbering Undertaking which is the operational tool agency for forest exploitations, be further expanded and strengthened so that the nationalisation policy is fully implemented by the targetted date.

Irrigation

Total net area irrigated is about 2.86 lakh hectares which works out to about 42% of the total area sown. The source of irrigation is mostly the Zamindari Khuls. These khuls provide a little over than 75% of the total irrigation. In the Vally it is a little over 86%. During the Fifth Plan almost all important Zamindari khuls i. e. khuls having culturable command area of 1,500 acres or more will be taken over by the Government. This will improve the maintenance of these khuls and stabilize the irrigation potential.

The present system of irrigation through Zamindari khuls used to be considered dependable till the recent droughts in the Valley highlighted the need for supplementing khuls irrigated by the tube-wells, dug wells, and storage etc. Investigations to assess ground water availability and schemes to tap the same, as far as possible, will be taken up during the Fifth Plan as also schemes of storages and tanks etc. to impound surface run off. Moreover in order to balance irrigation potential in the various basins in the Valley all irrigation sources will be put in a common grid. A similar grid for Chenab and Tawi rivers will be attempted in Jammu Division. This will be done with a view to utilise fully, the irrigation potential existing in this region.

In order to improve the utilisation of the irrigation potential, steps like levelling of land, construction of field channels, consolidation of holdings and better water management will be taken up. To achieve this objective, multi-disciplinary Project Authorities for all the important irrigation projects will be set up.

In view of the power generation programmes for the next 10-15 years, it is hoped that adequate quantities of cheap power will become available for Lift Irrigation. According to the perspective plan of power generation, about 345 MWs of power will be available by 1980-81 for Lift Irrigation. This will provide irrigation potential of about 1.7 lac hectares of land. Shelf-projects will be kept ready for implementation as soon the required quantum of power is assured.

Sheep Husbandry ✓

Substantial work has already gone into the improvement of the wool production quality of our flocks and the State can boast of perhaps the largest number of fine wool producing upgraded sheep. While this work will be intensified, it is proposed to increase the availability of

mutton by introduction of muttonous animals among the flock owners of the plains. The objective being to reduce imports, which are as high as 70% of the total assessed needs of the State by at least 50%. Development of sheep-husbandry will, besides, be the main plank in the developmental strategy for the backward areas; and this programme alongwith the programme for the improvement of grasslands, will be adequately provided for during the 5th Plan.

Animal Husbandry ✓

There is an acute shortage of milk in the State. According to rough estimates the total annual production of milk will be about 1.8 lakh tonnes at the end of 1973-74. This works out to about 100 grams per capita per day against the national average of 130 grams at the beginning of the Fourth Plan. According to accepted dietary standards, the total annual requirements of milk work out at about 3.85 lakh tonnes. Our objective in the Fifth Plan will, therefore, be to increase the milk production substantially and the level of production being aimed at 2.25 lakh tonnes annually. This improvement will be effected by an extensive programme of cross-breeding with exotic animals and the improvement of feed and fodder resources.

Poultry Keeping ✓

Poultry keeping on an organised scale, is a new venture in the State. The production of eggs by the end of the Fourth Plan is estimated at 75 millions against the estimated total demand, based on the minimum dietary requirement, of about 800 million eggs by the end of the Fifth Plan. Programmes aiming at improving the level of production of eggs and boilers and organisation of efficient marketing channels for the poultry produce will be introduced. Feed, the bug-bear of the poultry industry, will be produced and distributed in an organised manner

through the Agro-Industries Corporation, so that the imponderability of the private sector is eliminated altogether.

Industries

Manufacturing is the ultimate solution of our problem of un-employment, under-employment and slow economic growth. Proportion of income from this sector to the total State income is about 19% but bulk of this is contributed by cottage and village industries and handicrafts and the organised industries contribute only about 2% of the total State income. At present the rate of growth in the industrial sector is very low. According to State income estimates, the annual growth rate in the income generated in the industrial sector between 1966-67 and 1970-71 has been less than 2%. Another disturbing fact about industries in the State is that a very high percentage of installed capacity remains un-utilised. According to survey estimates, about 42% of the capacity was un-utilised during 1967-68 in the small scale industrial sector. In the Fifth Plan the approach will be (a) to have atleast 7-8% growth rate in the industrial sector, (b) to make all efforts to reduce the extent of under utilization of installed capacity to the minimum possible level and (c) to attach higher priority to the development of small scale and cottage industries.

Handicrafts

Handicrafts will have the pride of place in our efforts for development of State's economy. More than 78 thousand persons are employed in the manufacture of handicrafts and the total value of goods produced annually is Rs. 5.43 crores at present. The production and therefore, employment in this sector can be increased manifold if the artisans are assured of the supply of quality raw material, finance for production and above all a market with little dependence on the middleman. The Handicrafts (Exports and Sales)

Corporation will play a very important role in promoting this objective. The training of handicraft workers, whose numbers are dwindling due to a number of reasons including low economic returns and low social ranking of the artisans, will be organised on a larger scale. The social status which the Master Craftsman traditionally enjoyed will be restored to him by giving the well deserved recognition to his skill.

Power

Power will continue to be a high priority sector during the Fifth Plan. Per capita consumption of power which is the lowest in the country, will rise to 66 units per head by the end of the Fourth Plan. In order to reach the national level, substantial investment on the generation schemes is envisaged in the plan document. This is necessitated by the fact that the total demand at the end of the Fifth Plan is estimated to be of the order of 640 MWs against the total availability of 270 MWs. This takes into account 50% power from the first unit of Salal and the first stage of the proposed Lidder Project. Largest chunk of the demand for power comes from agriculture sector (lift irrigation and tube-wells) being of the order of 368 MWs.

17 to 18% of the villages will be electrified by the end of the Fourth Plan. According to the present programme of power generation, it will be possible to provide electricity for the electrification of all the villages in the State. Electrification of 3,000 additional villages is accordingly aimed at during the Fifth Plan with the assistance of the Rural Electrification Corporation. Additional 1,000 villages will be taken up for electrification in the State Plan being too far away and widely spread to qualify for assistance from the R.E.C.

Roads

In this sector emphasis will now be on the consolidation of achievements of the previous four plans and the three Annual Plans instead of proliferating the limited resources on a large number of works, a limited number of important works will be taken for concentrated attention. As a result of this policy ;

- (a) higher priority will be given to the removal of deficiencies in the existing system by providing missing road and bridge links. To start with all Tehsil Head-Quarters and Commercial centres, which are not so far linked with the State/District High-ways will be provided with such links ;
- (b) the road formation and specifications to be followed will be related to traffic intensity and the present policy of allowing a large time lag between the completion of the road upto fair-weather specifications and metalling and shingling, will be changed so that completion of first phase of the road construction is followed immediately by taking up of second phase ;
- (c) greater emphasis will be laid on the construction of link-roads. The objective being to connect as many villages with a population of 1,000 and above with the main road system in the State as the resources permit ;
- (d) in order to ameliorate the conditions of the people living in the specially backward area, major road links for connecting them with the main state arteries will be taken up on priority basis.

Education

In respect of elementary education at All India level the likely enrolment at the end of the Fourth Plan will be 84% in the age group 6-11 and 40% in the age group 11-14. The target fixed is to achieve 100% coverage in respect of boys in the age group 6-11 and 50% in the age group of 11-14 by 1975. In the State the position is slightly different. The percentage of school going children in the age-group 6 to 11 was 70% at the close of 1971-72 and it is expected to go up to 73% by the end of 1973-74. In the case of girls it is only 46% and likely to go up to 51%. In respect of children in the age group 11-14 the position is, however, slightly better in the State. School going children in this age group were 37% in 1971-72 and this coverage is expected to go up to 38% by the end of the Fourth Plan. The position in respect of girls is not, however, so satisfactory. The main emphasis, therefore, in the Fifth Plan will be on the expansion of primary education so that 100% coverage is achieved in respect of boys in the age group 6-11. Special measures shall also be adopted to improve the position in respect of girls. The target for Fifth Plan will be to achieve at least 50% coverage in all the Districts. The norm prescribed by the National Development Council that there should be at least one primary school within a radius of 1.5 kilometres will have to be modified as the distances here are very large, the terrain is mostly hilly and the population is very much dispersed.

Special programmes like providing free mid-day meals and school uniforms, books and scholarship to the children of poor parents, will be launched during the Fifth Plan, to motivate the poor parents to send their children to school and spare

them from family labour to which they are put to due to poverty. Winter vacations in the hilly areas of the State provide an opportunity for making a break through in the prevailing apathy. Ten experimental schools which have been started during the Fourth Five Year Plan, provide schooling during winter in the hilly areas and in summer, move to high land pastures to cater to the schooling requirements of the nomadic population. Results of this experiment will be closely watched, and if encouraging more such schools will be opened.

At the middle and the high level the main approach in the Fifth Plan will be to consolidate and improve the existing teaching standards. The target for coverage for children in the age group 11-14 (middle school) will be 50% and the present disparity in the coverage in different districts will be reduced to the minimum. At the University level the approach will be to consolidate the achievements made so far.

In order to enable a Higher Secondary pass to take to self-employment and also to reduce the pressure on the University education, vocationalisation of education at Higher Secondary stage will be introduced in accordance with the recommendations of the Sahay Committee.

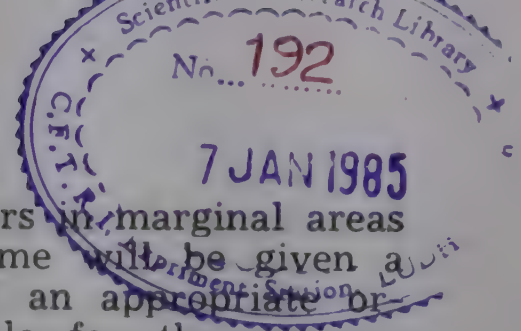
Only 63% teachers at primary level are trained at present. While this position will improve substantially by the end of Fourth Plan, the training programme for teachers during the Fifth Plan will have to be so organised as to provide adequate training facilities for the existing staff at primary middle and high-school level, besides looking after the fresh recruits. The objective being 100% coverage by the end of the Fifth Plan.

Even though the expansion of education has been very rapid in the State during past years the State is still among the most backward regions in the country. The literacy according to 1971 population census, is only 18.3% against the All India level of 29.4%. This is mainly due to the fact that we started with a very low base. In order to reach national level, therefore, an extensive programme for the education of the adults will be attempted.

One of the reasons for the prevailing backwardness of the State in the field of education is the existing practice of imparting education even at the primary level in Urdu or Hindi only. This subjects the child to heavy mental strains and retards his progress at the school. This system is partially responsible for the large number of drop-outs and wastage in our schools. After reaching the primary level many relapse into illiteracy because no reading easily comprehend. Some times back the State Government took a decision to introduce mother-tongue at the primary level. This decision has not been implemented fully for the lack of adequate reading material and text books. During the Fifth Plan conscious efforts will be made to fulfil this deficiency and a sizeable quantity of literature will be produced in the various languages of the State to meet the need for text books in the primary and reading material for the neo-litrates among the adults.

Public Health and Family Planning

In respect of Public Health the State is in better position than the rest of the country in respect of Doctor-population, bed-population and per capita expenditure. Nevertheless the number of centres and sub-centres will have to be increased due to the difficult topography and population spread. There are also backward and nomadic groups of population like Gujjars, Bakarwals and Gaddies for whom



mobile units will be provided. The existing centres and sub-centres lack many essential requirements such as equipment, building and residential accommodation in the interior areas. It will be necessary to make up the deficiencies so as to consolidate the level of achievement thus far reached. While the position in the State in respect of centres and sub-centres is happy, there is no organic link between the unit at various tiers of the Public Health hierarchy. The National Development Council is of the view that the emphasis in rural health will have to be provided. The existing centres and sub-centres lack many essential requirements such as equipment, building and residential accommodation in the inferior areas. It will be necessary to make up the deficiencies so as to consolidate the level of achievement thus far reached.

While, there is no shortage of doctors in the State and the doctor-population ratio is very good there is an acute deficiency of para-medical personnel in some fields especially nursing: Female health visitors and female nutrition workers. In order to build the multi-tier system, envisaged in the national approach and detailed above, it will be necessary to recruit suitable female staff and provide proper trainings.

The decennial growth rate of population in the State between 1961 and 1971 has been 29.7% against the national figure of 24.6%. In some of the Districts in the State the growth rate has been much higher. The family planning programme shall, therefore, be so stepped up as to aim at reducing the decennial growth rate of population during 1971-1981 to 25%.

Together with the expanded Family Planning Programme, care will be taken of pregnant mothers and pre-school children by providing nutritional aids, and education. At present some nutritional aids are available to pre-school children

and pregnant mothers in marginal areas only. This programme will be given a wider coverage and an appropriate organisation responsible for the comprehensive programme of nutritional education, school feeding, feeding of expectant mothers, feeding of pre-school children will have to be devised.

Drinking water Supply

Of the 6,900 villages in the State we expect to cover 1,030 villages (including 179 Moharas by the end of the Fourth Plan. This is hardly 20%). In terms of population this would mean a coverage of only 38%. The Public Health Engineering Division of the Ministry of Health, Government of India, has identified 4,000 villages in the State which are in need of immediate attention. Action for surveys and investigation has been initiated during the current plan and detailed projects for 100 villages are likely to be available in the beginning of the Fifth Plan.

Drinking water facilities are being provided in all the urban areas of the State. Water Supply in the important urban centres of Jammu and Srinagar has recently been augmented. Nevertheless full benefits of this augmentation have eluded the common-man due to the existing defective distribution system. The first task in the urban areas, therefore, which will have to be taken in hand during the Fifth Plan will be to take up phased improvement of the distribution system. To cater to the increased population and additional requirements necessitated by improved standard of living, schemes for augmenting the existing supplies will also have to be implemented. In order to attract institutional finance for investment on the urban water supply schemes the management of the existing schemes and implementation of the new ones may have to be entrusted to the Regional Development Authorities.

Housing and Urban Development

In the context of urban development, the more immediate task is to provide minimum housing facilities to the growing population of the principal cities of the State. The cost of housing sites within the two cities has been going up at sharp rates and the lower middle classes and poorer sections of the population are finding it extremely difficult to own housing sites. There is also a good deal of speculation in the sale and purchase of housing sites. In order to make land available for housing construction within the two cities, it is necessary to relate the development of new housing colonies to the establishment of satellite townships.

At present land values and the development costs of housing sites is out of reach of the poorer sections of the population. Measures will, therefore, be taken to provide housing sites to the poorer sections at reasonable costs.

Tourism

The Approach in tourism will be to pro-

vide integrated growth of important tourist centres, and dispersal of facilities so that the benefits of this industry are shared in various areas rather than being limited to the traditional places like Srinagar, Pahalgam and Gulmarg. The shift in the field will be the recognition of the fact that tourism is not an end in itself. Emphasis will be placed on the development of infrastructure rather than special facilities for tourists alone or providing subsidies in one form or the other.

In other sectors, while there will be no major change in the developmental policy the activities will be intensified to meet the demands of the growing economy. More effective and intensive methods of educating the people with various programmes of development and mass contact would have to be devised so as to ensure maximum participation of the people at various levels with the process of planning and implementation of specific schemes. In order to ensure balanced development of various regions and areas, planning at the district and other levels will be given a more concrete shape so that imbalances are spotted and removed speedily.

Chapter IV

Imbalances in Development

Intra-State Imbalance

The State of Jammu and Kashmir has a diversity of climate, topography and altitude. Along the high Himalayan mountain ranges, there are low-hills interspersed with Valleys and table lands. The largest area cradled into lofty mountains is that of Ladakh with a geographic area of about 38,000 sq. miles and the lowest density of population. Similarly, there are other hill-locked areas which have remained immune to the winds of change that have swept over the plain areas. The State is divided into five natural divisions, namely :—

- (a) *Indus Valley Tract*, having snow-capped and high mountains rising to over 20,000 ft. above the sea level extending to the whole of the District of Ladakh.
- (b) *Jehlum Valley or Kashmir Valley Region*, comprising three districts of the Valley bisected by the river Jehlum. On the other side of the mountains is the Kisben-Ganga Valley from Gurez to Karnah and thence meeting the river Jehlum at Domel ;
- (c) *Chenab Valley Tract*, comprising precipitous mountain areas lying to the south of Pir - Panchal range, extending to the Districts of Doda and parts of Udhampur ;
- (d) *Mountaineous Area*, lying between the Jehlum and the Chenab covering Poonch and Rajouri districts ;

- (e) *Area between Ravi and Chenab River*, extending from the south eastern border with the Punjab to Akhnoor Tehsil. This belt covers Kandi areas of Jammu region.

In our attempt to foster rapid economic development, the State is hindered by a number of obstructions, including its mountaineous terrain, diversities of climate, ranging from arctic cold to the intense heat of sub-tropical areas, long distance from the centres of trade and commerce in the country, and the difficulty of communications, lack of adequate financial resources to build up the minimum infrastructural facilities necessary for growth and, above all, hostile climatic conditions in most parts of the State. In an economically backward State like ours, there are pockets of extreme backwardness where the economic life of the people is characterised by subsistence agriculture, barter trade and primitive cattle breeding.

These areas have been identified and comprise the following regions :—

Jammu Province :—

- (i) Such areas as are not connected by motorable roads :—
 - (a) in District Poonch,
 - (b) in District Rajouri, and
 - (c) in District Doda ;
- (ii) Tehsil Mahore in District Udhampore ;

- (iii) Dudu-Basant garh in Tehsil Ramnagar (District Udhampur) ;
- (iv) Niabat Bani in Tehsil Basohli (District Kathua) ; and
- (v) Patwar Halqas Lohai Malhar and Maccheri in Tehsil Billawar (District Kathua)

KASHMIR PROVINCE : —

- (i) District Ladakh ;
- (ii) Niabat Gurez in Tehsil Bandipore (District Baramulla) ;
- (iii) Matchil and adjoining areas in the higher reaches of Tehsil Kupwara (District Baramulla) ; and
- (iv) Tehsil Karnah in District Baramulla.

JAMMU PROVINCE

Mahore Tehsil

Mahore Tehsil extends over 1,320 sq. kms. The density of population in the tehsil is about 50 per sq. km. The area is hilly and the configuration of the ground is rugged and the terrain is cut up into deep valleys. There are hardly a few plateaus or plain areas in the Tehsil. Habitations and cultivated fields are situated on steep hill-sides. Almost total lack of communication facilities severely limits the scope for the development of the area. Nearly 62% of the geographical area of the tehsil is covered by demarcated forests, all of which do not carry commercial forests. Less than 10% of the total land area is devoted to agriculture and only about 7% of the cultivated area is irrigated. The villages at higher elevations are predominantly populated by Gujjars and their main profession is live-stock rearing, particularly buffaloes. They are given to seasonal migration up and down the hillside, as the Tehsil has a varied climate from semi-tropical to temperate. There is severe under-employment in the tehsil.

Doda District

The District is bounded in the north,

north-east and east by Ladakh, in the south by Himachal Pradesh and in the west by Anantnagh district and parts of Udhampur district. It extends from the foot of Himalayas and Peer Panchal ranges and is interwoven by numerous mountains, leaving very little space for cultivation and village settlements. Due to the diverse topographical character of the district, its climate varies from sub-tropical to almost arctic cold of Paddar area in winter. The density of population as per 1961 census, was 46 per sq. mile

Poonch and Rajouri Districts

The terrain of Poonch and Rajouri districts is mostly mountaineous or hilly. The two districts are along the Line of Actual control, with Pakistan on the west. The total cropped area in the two districts is nearly 1.80 lakh acres against the total area of 8.61 lakhs acres recorded in village papers. The principal crop in the two districts is maize followed by small area under wheat and rice. The subsistence agriculture, lack of communication facilities and primitive animal husbandry characterize the economic life of the people. Gujjars and Bakerwals form a sizeable portion of the total population. They migrate with their cattle and sheep to pastures in the Valley during Summer.

Bani Area

Bani area of tehsil Basohli in Kathua district comprises 11 Panchayats. The entire area is hilly and mountaineous. The total geographical area is 1.15 lakh acres out of which 0.08 lakh acres only are under cultivation of which only 516 acres are irrigated. The area under pastures is 8,528 acres. Maize is the main crop. Apple is the major fruit grown in the area.

Other Areas

These include Dudu-Basant Garh in Ramnagar Tehsil of Udhampur District and Lohi Malhar and Maccheri Pathwar Halqas of Tehsil Billawar in Kathua district. The

areas in question being mostly hilly and mountaineous, there is not much cultivable land available. Even in the small cultivable patches, the productivity is low and methods of cultivation are primitive. The population is also thinly spread and the means of communication and transport are extremely poor.

Ladakh District

Ladakh District covers the largest geographical area in the State and perhaps in the country as well. It is cradled inside the lofty Himalayan mountain ranges. A motorable road fit for plying of trucks and buses is in operation between Srinagar, Kargil and Leh. Construction of the road to inaccessible areas of Zaskar is in progress. So is the road from Leh to Nobra. In spite of this, the major part of the territory within the district is isolated. The district experiences almost arctic cold in winter. The climate is generally dry and cold and the rainfall is very scanty. Cultivation is possible only in irrigated areas. The district is split up diagonally by the river Indus.

Gurez

This Niabat is at an average altitude of 8,000 ft. above the sea level. It is bordered on the north by the Line of Actual Control and is contiguous with Ladakh district in the east. It is cut off from the rest of the State by tall mountain ranges and is accessible through the Rajdhani pass at a height of 11,600 ft. for only seven months in a year. Even this link is not very dependable, being capable of carrying only jeeps. The soil is mostly rocky and barren. There is only one crop, in a year, and productivity of land is very limited. People are extremely backward both economically as well as socially. Land holdings are very small and there is total lack of infrastructure for development.

Karnah Tehsil and Matchil Area

These areas are economically the hinterland

of the State, being very near the Line of Actual Control and cut off from the rest of the State by very tall mountains, for at least five months in a year. There is no road link between Matchil and the rest of the State and the link with Tangdhar passes over the high Nastatune Pass which remains closed for four to five months in a year. As with other specially backward areas, people here too are economically very backward. Special efforts are required to pull them out of the stagnation in which they find themselves to-day.

Objective, Strategy and Approach

The aim of planned development in the Specially Backward Areas is to engineer, structural changes which would ensure quick economic development within the shortest possible time. These changes would ultimately lead to minimising the existing disparities and ensuring social justice. The strategy will aim at extricating the economy from the existing stagnation through the mechanism of intensive area development approach and will therefore aim at:—

- (i) creating facilities and conditions conducive to intensified investment directed at optimal and economically efficient use of resources thereby increasing incomes of the people, generating increased employment opportunities and accelerating productivity; and
- (ii) providing infrastructural facilities, adequate coverage in respect of social services in order to rid the people of disease, ignorance, social disabilities and to simultaneously ensure for them provision of essential needs under a minimum programme.

Planned development of these areas will have to be informed by considerations of:—

- (i) providing immediate relief particularly by way of social services capable of producing an impact on the minds of the people in a short duration, which

will necessitate immediate establishment or strengthening of organisational and institutional frame;

- (ii) providing infra-structural facilities particularly in the shape of communications, transportation, marketing, storage, credit, electrification, irrigation, etc. and also extension of general and technical education, public health, veterinary institutions and water supply which will obviously claim a longer duration; and
- (iii) increasing progressively coverage and quality of infrastructural facilities and social services and of distribution of inputs, provision of improved technical know-how, skills and minimisation of transport costs of imports and exports and ensuring optimal and efficient utilisation, conservation and management of natural and other resources, for industrialisation so as to achieve accelerated development of the areas which calls for a perspective planning.

Apart from the hostile environment, difficulties in communications and lack of adequate resources, the backwardness of these areas is also due to organisational inadequacies. In order, therefore, to ensure speedy development of these areas in terms of the strategy suggested above, administrative and structural changes will have to be introduced as a prerequisite to the implementation of the developmental programmes. Here we can benefit from the experience of Ladakh where single-line development administration has over the years, been able to produce good results. It is accordingly proposed to induct a single-line development organisation responsible for both administration as well as, the implementation of developmental programmes. The level of the officers who would head these organisations in various areas, will depend on the size of individual problems.

No process of development can produce the desired impact unless involvement of the

people whom the developmental programmes affect, is ensured at the plan formulation as well as implementation levels. The schemes, to be drawn up by the technical departments will be discussed and approved by the Development Committees to be formed for this purpose. These Development Committees will, as in the case of Ladakh district, comprise representatives of the people selected from various parts of these areas. The recommendations of the Development Committees for backward areas & classes of population besides a separate Committee for Ladakh, will submit their recommendations to a State level Development Board. This Board will take a final view of the programmes which should be recommended for approval and subsequent implementation.

Programme for Special Areas and Sections of Population

Apart from the specially backward areas described in the precedings paras, there are sections of population in the State which have been touched only marginally by the process of development.

Of the communities which are in need of special attention on account of their social and economic backwardness, Gujjars and Bakarwals claim our first attention. Their backwardness is a result of a number of factors; including their migratory habits, their conservatism, their social attitudes and above all, the accident of their getting attached, wherever they are settled, to an agro-climatically hostile environment. The problem of the improvement of the lot of these communities is, therefore, essentially a composite and complex mix of social and economic factors. Area Development approach by itself is not sufficient to bring them out of their present stagnation unless it proceeds in consonance with the development of the people. The benefits of development which have a tendency to get accumulated

in the hands of a few socially advanced sections of the people, must in this case particularly diffuse as widely as possible so that the possibilities of exploitation are altogether eliminated. In the following pages, time bound, integrated area development and other programmes, suitable to the genius and economic conditions of the people, ensuring as far as possible the elimination of various forms of exploitation have been suggested for implementation in a phased manner.

The Gujjars and Bakarwals are spread over almost all the districts of the State but are predominantly concentrated in the districts of Poonch, Rajouri, Doda and parts of Udhampur and Kathua in Jammu Province. In Kashmir division, they inhabit areas around Wangat, Sindh Valley, foot-hills of Bandipore tehsil, Tehsil Karnah, parts of Uri tehsil and in the Karevas of Tehsils, Gulmarg, Badgam Beerwa Chodura Shopian, Kulgam, Pahalgam and Tral.

In the absence of a systematic survey, it is not possible to assess the level of over-all development of these people during the last 25 years. Economic indicators, from isolated studies, give an incomplete picture and only indicate broad dimensions of the problem. Thus some groups while economically not very bad off, are socially extremely backward; others are in real economic distress. Some groups among these communities are migratory in character while others have now settled on land and are eking out a poor living.

While social and economic backwardness are the common features of both the communities, it is possible to divide them into following five categories from the point of view of special treatment required in each case:—

- (1) Gujjars who are now settled on land, but are extremely poor on account of poor fertility of land;
- (2) Dudi Gujjars who have sizeable herds,

usually of inferior cattle but are exploited by the owners of Araks and the merchants who buy their milk and milk products;

- (3) Dudi Gujjars who do not own enough cattle and are therefore, in great distress;
- (4) Bakarwals who are nomadic and own large flocks but are socially backward;
- (5) Bakarwals who are migratory but do not own large flocks and are, therefore, in distress.

According to 1961 Census, the population of the two communities speaking Bakarwali and Gojri languages, was as under:—

District	(Lakh Nos.)		
	Gujjars	Bakarwals	Total
Anantnag	0.27	—	0.27
Srinagar	0.14	—	0.14
Baramulla	0.23	—	0.23
Total Kashmir	0.64	—	0.64
Doda	0.25	Neg:	0.25
Udhampur	0.25	0.03	0.28
Jammu	0.06	0.01	0.07
Kathua	0.03	0.01	0.04
Poonch-Rajouri	0.86	0.01	0.87
Total Jammu	1.45	0.06	1.51

Out of a total of 2.15 lakhs, the areas comprising concentrations of the Gujjars and Bakarwals claim a population of 1.91 lakhs. These areas have been grouped as

under :—

Kashmir Division :

Sindh Valley	) with population	
Bandipore area	) approximately	
Keller Block	)	0.50 lakhs
Noorabad zone)	
Charari Sharif area)	
Tehsil Karnah and other areas		0.17 lakhs

Jammu Division :

Poonch and Rajouri Districts	0.87 lakhs
Doda District	0.25 lakhs
Part of Udhampur District comprising	
Gool - Gulabgarh, Poni Bark	
area in Reasi Tehsil	0.20 lakhs
Kathua District	0.02 lakhs

So far as the five zones of Sindh Valley, Noor-Abad, Kellar, Bandipore and Charari Sharif are concerned, the entire population comprising Gujjars and Bakarwals inhabiting these areas is being included for special treatment under the programmes detailed in the following pages. In respect of other areas of the Kashmir Valley as, for instance, Karnah Tehsil, the Gujjars and Bakarwals will be looked after by programmes chalked out for the development of specially backward areas. As for the Jammu Division about 90% of the total population of Gujjars and Bakarwals would be covered by Specially Backward Area Development Programmes. It is thus clear that almost the entire population of Gujjars and Bakarwals will come within the fold of special programmes designed for the improvement of their lot.

One common feature which distinguishes them from the rest of the population is their traditional association with cattle and sheep breeding. Any strategy devised for the improvement of their socio-economic conditions must, therefore, be informed by this fact and the main thrust should, therefore, be in the direction of the development of animal husbandry and sheep breeding among them.

While ultimate solution of the problem lies in formulating long-term proposals based on detailed socio-economic surveys of these communities for the development of pastures, improvement of the quality of cattle and sheep, raising of the literacy levels among these people and introducing measures which would result in their social improvement, it is possible to draw up programmes which can be implemented in a short time and will result in ameliorating their conditions to a large extent.

The programmes so drawn up, emerged as a result of the painstaking efforts of the Committee specially set up by the Government with Dr Ghulam Mohy-ud-Din Joint Secretary Planning (now Director Animal Husbandry) as the Chairman. The Committee comprised experts drawn from various disciplines, and the schemes formulated by them were sent for examination of the heads of departments and subsequently discussed with them. These programmes are limited in scope to cover the Gujar and Bakerwal population living in the parts of the Valley. Programmes formulated for the specially backward areas will cater to the needs of the communities living in other parts of the State.

An outlay of Rs. 16.00 lakhs was set apart during 1973-74 for taking advance action regarding implementation of the schemes in the 5th Plan. The implementation of the schemes during the year 1973-74 is by way of initiating preparatory action so that the stage is set for expeditious implementation of long-term programmes, when the 5th Plan is launched in 1974. It is particularly essential to take such advance action because of the fact that the areas comprising Gujjars and Bakarwals are mostly situated in the upper reaches of the Valley, where due to inadequate means of communication and peculiar climatic conditions, the working season is very limited. The intention in taking up the measures right now is also to create awareness amongst the beneficiaries i.e.

Gujjars and Bakarwals about the programmes to be taken up in the 5th Five Year plan for their uplift. The total cost of the Schemes would be Rs. 1303.80 lakhs with the following yearwise phasing during the 5th Plan in respect of outlays:—

Outlay
Rs. in lakhs.

1973-74	16.00
1974-75	70.00
1975-76	150.00
1976-77	200.00
1977-78	250.00
1978-79	330.00

Total Fifth Plan (1974-79)=1000 00

As will be seen from the statement II appended hereto, the thrust of the schemes is in the direction of Animal Husbandry and Sheep Breeding which claims a 5th plan outlay of Rs. 298 lakhs followed by Roads for which the provision has been made at about Rs 180 lakhs and minor irrigation with Rs. 100 lakhs for the Fifth Plan. Agriculture claims Rs 83 lakhs which is in addition to Rs. 78 lakhs for the Horticulture Development. Sizeable funds are proposed in the Forest sector under which special attention will be given to soil conservation measures and treatment of Nautor areas and above all, development of pastures and grass lands. About Rs. 30 lakhs have been provided for soil conservation, most of which has been set apart for schemes relating to agricultural lands. In the Social Services sector, education occupies a prominent place and Rs 40 lakhs have been set apart for extending education, especially at the primary level. It is also proposed to have, on a very large scale, provision for incentives, hostels, scholarships and other facilities.

Social welfare measures will be taken up in all the zones by provision of training cum-production centres like spinning and weaving, willow works, carpentry, smithy etc. and establishment of destitute homes. The most important component of the

scheme in social welfare is to provide loans for housing and for provision of house sites and also to have transit sheds constructed in alpine ranges.

The physical targets under some important sectors are reflected in the statement enclosed. Mention may however, be made here of some important activities proposed in the case of agriculture. It is proposed to undertake soil conservation of an area of 8570 acres, introduction of high-yielding variety of paddy in 24,000 acres, distribution of high yielding seed (330 quintals), pest control measures over an area of 35,000 acres and setting up of three potato seed multiplication farms. It is proposed to introduce bee-keeping and also provide agricultural implements on subsidised rates to the farmers. Training and research are yet other features of the agriculture plan.

To boost the development of horticulture in the areas, it is proposed to establish model orchard-cum-nurseries at centrally located places. Two ten-acre nurseries would be set up each in Noorabad, Chararisharif and Keller areas and two 5 acre nurseries one each in Sindh Valley and Bandipur zones. These nurseries would supply quality planting material to the farmers. In addition, plants would be supplied from other nurseries in the Valley. The area under orchards would be extended by giving loan assistance to the farmers. During the period of 1974-75 to 1978-79, an acreage of 2625 would be covered under walnut in Noorabad, Keller and Chararisharif zones while a target of 875 acres is fixed for the other two zones. In addition, 1275 acres will come under other fruits in the first 3 zones and 425 acres in the other four. For popularising improved methods of cultivation one half-acre demonstration plot per 50 acres of planted area would also be organised.

As regards minor irrigation, it is proposed to undertake engineering surveys and investigations. Some Pilot schemes for sprinkler irrigation are being introduced

and the results, if found encouraging, would be extended to other areas, depending upon the technical feasibility of such schemes. The irrigation facilities are proposed to be extended during the Fifth Plan through construction of small dams, small irrigation canals and by introducing sprinkler irrigation particularly, on hill slopes.

As for Animal Husbandry programme, the salient features of the schemes are the establishment of artificial breeding stations and key village blocks with eight sub-centres in Bandipore. It is also proposed to set up artificial in-semination centres in Sindh Valley, Keller, Noorabad and Charisharif. For improving livestock breed; breeding bulls would be distributed among farmers of the selected areas. Veterinary dispensaries would be set up in Sindh, Keller, Noorabad and Charisharif. In addition, mobile dispensaries would be set up in these areas. Loans are proposed to be given to farmers for purchase of improved livestock and milch animals. Cattle breeding farms would be established in Sindh Valley, Keller and Noorabad zones. Establishment of cerameries is yet another feature of the plan.

The programme regarding sheep development would include setting up 21 sheep and wool extension centres which would cover 115 villages with a breedable sheep population of 0.74 lakhs. The physical programme of the scheme is summarised in the following table :—

Zone	No. of Centres proposed	No. of villages covered	Breedable population covered (Lakh Nos.)
Kangan	7	31	0.27
Bandipore	6	41	0.13
Cherarisharif	3	15	0.12
Keller	5	29	0.22
Total	21	115	0.74

Besides the physical programme mentioned

above, in respect of forests, it is proposed to cover 750 acres under re-generation and re-habilitation programme, under take wide-spread protection works and take up plantation of 1.80 lakh trees as a measure of farm forestry. In particular, pasture development including aerial fertilisation will be carried out over an area of 1600 hectares. In respect of treatment of Nautor areas, coverage has been targetted at 375 hectares.

Adequate arrangement has been suggested for making available medical service to the Gujjars and Bakarwals during their stay in grazing forests. 13 mobile medical aid centres are proposed for the migratory Gujjars. For the semi-migratory chopans who go to bahaks in summer only and return to the village, sixteen seasonal medical aid centres have been proposed.

In the industrial sector, for which Rs. 60 lakhs are proposed, it is envisaged to set up common facilities centres in spinning, weaving and dyeing in each of the five zones to supply spinning wheels, rani char-khas etc. and provide for conversion of pit-looms into fly-shuttle looms, giving of soft loans to small units and imparting training to various craftsmen and under-taking various technical feasibility studies.

Since absence or inadequacy of communications is the main bottleneck in the development of backward areas, it is proposed to provide sizeable funds i. e. of the order of Rs. 180 lakhs to finance 35 schemes in order to upgrade about 30 kms. and to construct additional road length of 242 Kms. These achievements will, however, be fully available on completion of schemes.

With the construction of this road length a net-work of communication lines will be laid to provide links to various areas from the main roads. The strategy in taking up the scheme is informed by considerations of providing vehicular communication to the unopened areas with the growth centres so.

as to facilitate marketing and dissemination of information, and quick trade with the ultimate object of activating the economy. The outlay proposed will partly be available for construction of four bridges also.

The schemes which will be taken up during the Fifth Plan, as discussed above will be in addition to some of the normal programmes which are available for the State as a whole, as for instance, rural electrification, water supply and some other measures provided for in the Minimum Needs Programme. In fact, there are some of the schemes already in progress in these areas which will also yield benefits for the backward areas.

Development of Kandi Areas in Jammu

Scarcity of water resources, lack of knowledge about dry farming, absence of small industrial units, inadequate development of horticultural resources and general aridness of the areas, are responsible for the prevailing backwardness of the people in parts of Jammu region generally described as Kandi. A committee of officers appointed in April 1967 to survey the area and assess its potential have divided the Kandi belt into 3 zones. These are:

1. *Lower Zone*:—This forms the foothills of this area and which is bounded by the existing canals and the National Highway in the south with a reasonably good soil

2. *Middle Zone*:—In this zone, the soil is mostly shingle and boulder and no soil covering exists over the lands. This is the worst area in the whole region.

3. *Upper Zone*:—The upper zone mostly comprises the forests which is the abode of Bakarwals and Gujjars

The Gujjars comprising these zones have been identified for purposes of prepar-

ing the works programme. Lengthwise, the Kandi belt has been divided into following sectors :—

Sector 'A'

This extends from left bank of Tawi Munawar upto the right bank of Ravi along the Partap canal, Ranbir canal and the National Highway roughly into a contour of R. L. 1500 above M.S.L. This sector 'A' is further sub-divided into the following sub-sectors:—

- (i) From left bank of Tawi Manawar upto right Bank of Chenab (Akhnoor Village).
- (ii) Left bank of Chenab (Akhnoor) up to right bank of river Tawi (Jammu).
- (iii) Left bank of Tawi up to right bank of Bahlol (Birpur-Kaluchak)
- (iv) Left bank Bahlol to right bank of Basantar.
- (v) Left bank of Bansantar upto Lakhampur.

Sector 'B'

Mohrale area extending from left bank of Chenab to left bank of Ravi, Dhanni, Bakhta, Hatli and Thein.

Sector 'C'

Right bank of Ravi from Basohli to Mahanpur including Dansal and both sides of Dhar-Udhampur road.

Speedy development of Kandi areas in Jammu will be one of the objectives of the Fifth Plan. Even though substantial improvement has come about in these areas as a result of implementation of a number of schemes recommended by the Committee appointed by the State Government vide

Order No 236-D of 1967 dated 25.4.1967 mentioned above during the Fourth Plan period, nevertheless it is necessary to implement additional special developmental programmes in v plan to meet the peculiar needs of the area so as to ensure its faster development. General development programme drawn up by the various departments will affect the development of these areas also. Special programmes for Kandi Development are proposed in the following sectors:—

	(Rs. in lakhs)
Water supply	243.17
M&M Irrigation*	N.A
Agriculture & Allied Programmes	115.62
Roads	235.33

Total	594.12

* (The total provision on various irrigation schemes includes Rs. 30 crore Project of Ravi Canal with Rs. 15 crore 5th Plan outlay.)

The outlays proposed above will be provided within the ceilings for various sectors in the Fifth Five Year Plan.

Programmes like Development of Education which are covered by the Minimum Needs Programme and are related to the recommendations made in the Sahay Committee Report, and the norms laid down in the national approach to the Fifth Plan document, will ensure the educational development of this area to the State level. Similarly, health-cover to the desired extent, will also be provided by the programmes drawn up under Minimum Needs Programme. Development of other social infrastructure will be ensured through the common programmes drawn up by the departments.

Development of Ladakh

There was no separate Plan as such for Ladakh District upto 1961 when the 3rd Plan was launched. The expenditure in the 3rd Plan was however, Rs. 143.00 lakhs. For subsequent period, the expen-

diture is as under: -

	Rs. in lakhs
1966-67	Rs. 56.72
1967-68	Rs. 31.42
1968-69	Rs. 44.33

The likely expenditure during the Fourth Plan is expected to be of the order of Rs. 546 lakhs against an outlay of Rs. 600 lakhs. The 5th Plan is approved for Rs. 1800 lakhs.

The major portion of the Plan allocation has gone for building up of the infrastructure like roads, irrigation, water supply and power. In order to speed up the pace of work, steps have been taken to procure earth moving machines such as Bulldozers, Crawlers, Tractors, explosives etc. It has also been decided to make greater use of local materials such as stones and timber in preference to steel and cement. During the Fifth Plan, funds have been proposed for heavy tools and plants for the engineering works. A construction Division for the construction of Kargil Zaskar road has been sanctioned and a Mechanical Division is also expected to be sanctioned shortly. Investigation Division in the District is being strengthened.

The improvement of grim (a variety of barley) grown in the district has been taken in hand and during the Fifth Plan, attention will be concentrated on evolving high yielding varieties so that production per unit area is increased. A number of different strains of exotic grasses and legumes has been obtained and trials are being carried out to discover the best strain for propagation. Various varieties of sunflower were put to test and tangible results have been obtained. The promising strains of sun-flower are being multiplied at the departmental level as well as in the private farms. During the Fifth Plan, the cultivation of cumin (Zeera) will be intensified.

The district has good potential for development of horticulture. Attention will accordingly be paid to the increased production of planting material. Cultivation of potatoes and vegetables will be stepped up.

As there are vast pasture areas in the district, it is proposed to apply chemical fertiliser over as large an area as possible to increase the carrying capacity.

In the Animal Husbandry Sector, main thrust will be in the direction of improving the milk yield of the cattle by cross breeding with exotic animals. It is proposed to re-organise the existing breeding farm at Nubra and to intensify the work on Yak breeding. It is also proposed to provide better health cover for the cattle. Fodder development programme will be taken up on a bigger scale.

The district has a total sheep and goat population of 0.77 lakhs and 1.06 lakhs respectively. So far, only 15,000 ewes have been covered for upgrading. It is proposed to increase the foundation stock of the sheep farm at Matho. The breed of local Pashmina goats will be replaced by new stock by selective breeding of local Pashmina goats with exotic pashmina breeds from U.S.S.R., Mangolia and Afghanistan.

The Karakul Sheep Farm in Sanko will start functioning during the 5th Plan. It is also proposed to set up more sheep development centres and undertake intensive sheep development schemes. The total outlay proposed for the schemes in the Animal Husbandry sector is Rs. 60.00 lakhs.

The co-operative structure in the district will be revitalized to service the expanded programme of agricultural production.

It is proposed to improve the working of consumer stores in Leh and Kargil. The marketing of vegetables and fruit will be taken up in the co-operative sector. It is also proposed to construct godowns for storage

of agriculture inputs and consumer articles.

There are at present 8 schemes in operation in the district in Minor Irrigation Sector. These are proposed to be completed during the Fifth Plan when additional schemes are also proposed to be taken up.

Greater attention will be paid to ongoing Hydel Power Project of Stakna. It is also proposed to take up the Suru Hydel Project in case there is delay in its execution by the Central Government.

The outlay proposed for the construction of roads, bridges including purchase of heavy tools and plant is, Rs. 250 lakhs. Although a motorable road links Srinagar with Leh, interior areas are still unconnected and continue to remain isolated. A more expanded programme of link roads will be taken up during the 5th Plan.

12 Rural Water Supply schemes have been taken up during the 4th Plan period, some of which will spill-over to the Fifth Plan. More rural schemes are being taken up during the next Plan. The total outlay proposed for all these schemes is Rs. 30 lakhs. So far, 30 villages and 2 urban centres have been provided with potable water.

In order to provide employment to the educated youngmen in the District and to enable them to acquire new skills, it is proposed to set up two Industrial Training Institutes during the Fifth Plan. Necessary steps for housing the I.T.I. and purchase of equipment are being taken.

In accordance with the recommendations of the High Power Committee on educational reform, it is proposed to convert two High Schools at Leh and Kargil into Junior Colleges. It is also proposed to have two residential schools so that promising students from interior and far-flung areas are provided education in these schools at Government expense. The

programme of opening of more schools and upgrading will be continued. More amenities will be provided for sports and youth activities.

During the 5th Plan, the programmes for development of handicrafts and cottage industries will be continued. Emphasis will be placed on carpet weaving, namdha manufacture and embroidery work.

Total Outlay for Backward Areas and Classes :

An allocation of Rs. 1800 lakhs has been approved for the 5th Five Year Plan in respect of Ladakh and Rs. 1078 lakhs for the supplementary programmes for development of Backward Classes like Gujjars and Backerwals. The specially Backward Areas of the State will claim about Rs. 2000 lakhs

outlay during the Fifth Plan. Similarly, even from the incomplete data available, it is revealed that an amount of Rs. 600 lakhs has been set apart for special measures for development of Kandi Areas in Jammu Division which covers only sector like Roads, Water Supply and partly Agricultural activities, excluding outlay of Rs. 1500 lakhs on Ravi Canal Project. These figures for Kandi Development Jammu will swell up appreciably with the availability of data in respect of other sectors. Even without Ravi, the available data brings out a sizeable outlay for backward Areas and Classes, being nearly of the order of Rs. 5500 lakhs for the 5th Plan, which is about 16 % of the total State Plan outlay. In addition, areas along the line of Actual Control which do not fall within the purview of Specially Backward Areas are also being earmarked for special developmental effort.

FIFTH FIVE YEAR PLAN

Sectoral Break-up of Outlays

(Programmes for Gujjars and Bakarwals)

(Rs. in lacs).

Agriculture and Allied Programmes :

Improved Seeds	..	8.00
Fertilizers	..	16.00
Plant Protection	..	7.00
Implements	..	4.00
Extension and Trainings	..	2.00
Commercial crops	..	4.61
Agriculture Research	..	4.40
Fodder Development	..	2.25
Apiculture Development	..	4.74
Soil Conservation	..	30.00
Horticulture	..	78.00
Animal Husbandry	..	260.00
Sheep Husbandry	..	38.00
Forests	..	25.00
Minor Irrigation	..	100.00
TOTAL	..	584.00

Industries and Mining	..	40.00
Roads	..	180.00
General Education	..	40.00
Health	..	6.00
Social Welfare	..	100.00
Provision for areas other than five zones of Kashmir Valley	..	50.00
GRAND TOTAL		1000.00

FIFTH FIVE YEAR PLAN

Physical targets in respect of important Programme

(Programmes for Gujjars and Bakarwals)

Item	Unit	Target for 5th Plan
1	2	3
Agriculture :		
Establishment of Seed Multiplication farms	.. Lakh acres	0.24
Plant Protection (Maize)	.. -do-	0.35
Extension and Farmers training	Lakh farmers	0.10
Subsidy on Potato seed	.. Lakh acres	0.04
Agriculture Research farms	.. Nos.	1
Fodder Development	.. Acres	1500
Apiculture farms	.. Nos.	4
Soil Conservation	.. Lakh acres	0.09
Establishment of Nurseries	.. Nos.	10
Extension of fruit cultivation	.. Lakh acres	0.06
Animal Husbandry and Sheep Breeding :		
Opening of dispensaries for animals	.. Nos.	10
Poultry farms Extension centres	.. -do-	5
Setting up of Poultry Farms	.. -do-	2
Establishment of Sheep and Wool extension centres	.. -do-	21
Establishment of crimaris etc	.. -do-	4
Forests :		
Pasture Development including aerial fertilization	.. Lakh Hec.	0.02
Farm forestry	.. Lakh plants	1.80
Regeneration and rehabilitation of forests	.. Lakh hec.	0.01
Treatment of Nautoer areas	.. Hec.	375
Roads :		
Upgrading	.. Kms.	21.5
New Construction	.. -do-	117.5
Health :		
Opening of medical Aid centres	.. Nos.	13
Opening of seasonal Medical Aid Centres for six months	.. Nos.	16

Chapter V

Financial Resources for the Fifth Five Year Plan

An outlay of Rs. 158.40 crores was originally approved for the Fourth Five Year Plan and was proposed to be financed as under:—

	(Rs. in crores)
1) Central Assistance ..	145.00
1) Additional resources mobilisation by the State Government ..	9 00
3) Institutional finance ..	4.40
	— —
Total :	158.40

The actual pattern of financing has, however, been slightly different for the reason that because of higher step-up having been allowed under priority sectors like power, irrigation, roads, etc, the likely expenditure during the Fourth Plan will be of the order of Rs 162 crores. The stepped-up outlay has been financed as: —

	(Rs. in crores)
1) Central Assistance ..	140
2) Institutional Finance ..	5
3) Contribution by the State Government ..	17
	— — — —
Total:	162

From this table it will be clear that against proposed State contribution of Rs. 9.00 crores the actual contribution will be of the order of Rs. 17 crores.

In order to achieve the minimum objectives laid down in the Approach Paper, namely:

- (a) five per cent annual increase in the per capital income;
- (b) creation of adequate job-opportunities so as to provide gainful employment to the additional labour force as well as to the existing un-employed, and
- (c) reduction of inequalities in the socio-economic development of various regions and various population groups.

an outlay of Rs. 425 crores for the Fifth Five Year Plan was proposed by the State Government. Now the outlay approved for the State Plan is of the order of Rs. 336 crores. A part of the investment proposed earlier on some of our projects like Uri Hydel Project and Basohli Cement Plant will now be financed under the Central sector. Besides, the actual planned investment even in the State will be much large because in sectors like large and medium scale industries co-operative sector, housing and urban development, etc, only the equity share or seed money or the State's Component of the outlay has been provided under the State Plan. In order to finance an investment of this magnitude, the State will make a concerted

effort in raising necessary resources from all possible sources including financial institutions.

On the non-Plan side, the State is expected to have a deficit. The Fifth Plan will, therefore, have to be financed entirely by:—

- (1) such amount of Central Assistance as may be allocated to the State;
- (2) Institutional finance which may be allocated by the Planning Commission for housing, co-operative and other programmes,
- (3) Market borrowings to the extent which may be allocated by the Government of India for our Electricity Board;
- (4) Contribution which the State Government will be able to make on account of fresh measures of additional resource, mobilisation during the Fifth Plan.
- (5) Taking up of such programmes for implementation for which direct finance by Commercial Banks or other Institutions may be available.

Financial Institutions and Borrowings by the State Enterprises.

On the basis of latest estimates the availability of institutional finance will be as under :—

	(Rs. in crores)
(a) Loans from L. I. C. for housing programmes.	2.75
(b) Loans from R. B. I for co-operative programmes.	1.65
(c) Loans from L. I. C. by the Electricity Board.	3.00
(d) Market borrowings by Electricity Board.	20.65
(e) Loans from Rural Institutions by other State Enterprises, Corporations Electrification Corporation.	15.00
Total	43.05

Mobilisation of Additional Resources by the State Government:

As indicated earlier the total resources raised by the State for financing Fourth Five Year Plan will be of the order of Rs. 17.00 crores as against Rs. 9.00 crores originally estimated. This has been due to the additional efforts made by the State Government. These efforts and the tempo will continue in the Fifth Plan also. There is not, however, much scope for introducing new taxes in the State, as according to a recent study conducted by the National Council of Applied Economic Research, New Delhi (October-1972), Jammu and Kashmir State is one of the highest taxed states. According to this study, per capita state tax revenue is about 4.67% of the per capita income. The corresponding proportion for Punjab is 4.46%. In most other States the incidence of the State taxes is less than what obtains in Jammu and Kashmir State. In spite of the position the estimates of additional State resources for the Fifth Plan on this account have been placed at Rs. 20 crores.

To Summarise, therefore, the total State contribution including Institutional Finance, will be as under :—

	(Rs. in crores)
1. Institutional Finance	43.05
2. Additional Resources mobilisation.	20.00
Total :	63.05

As mentioned earlier, the size of the State Fifth Five Year Plan will be of the order of Rs. 336 crores and the State's contribution including institutional finance, will be of the order of Rs. 63 crores. The balance shall be met through grants and loans from the Government of India.

The summarise the total state contribution including institutional finance, will be as under :—

	(Rs. in crores)
1. Institutional Finance	43.05
2. Additional Resources mobilisation.	20 00
	———
Total :	63.05

As mentioned earlier, the size of the State Fifth Five Year Plan will be of the order of Rs. 336 crores and the State's contribution including institutional finance, will be of the order of Rs. 63 crores. The balance shall be met through grants and loans from the Government of India.

GENERAL STATEMENT 'A

5th Five Year Plan (Programmewise Financial Outlays)

(Rs. in Lakhs.)

Head of Development	Fourth Plan		
	Outlay	Likely expenditure	5th Plan Outlay
1	2	3	4
I. Agriculture and Allied Programmes:			
1. Agriculture Research and Education ..	204.53	120.09	300.00
2. Crop Husbandry :			
a) Cereals & others	575.66	465.25	700.15
b) Parks & Gardens	42.00		50.00
c) Horticulture ..	226.68	138.61	329.00
d) Horticulture Planning and Marketing ..			150.00
e) Others ..	30.10	4.68	25.85
TOTAL (a-e) ..	874.44	608.57	1255.00
TOTAL (1-2) ..	1078.97	728.66	1555.00
3. Minor Irrigation ..	729.50	773.11	2000.00
4. Animal Husbandry and Sheep Husbandry ..	195.00	391.02	958.00
5. Dairying and Milk Supply ..	75.00	61.27	60.00
6. Forests ..	325.00	174.31	450.00
7. Soil conservation ..			100.00
i) Forest lands	250.00	111.62	75.00
ii) Agriculture lands	25.00	8.81	40.00
8. Fisheries ..			
9. Land Reforms & Consolidation of Holdings ..	37.03	67.33	260.00
10. Command Area Development ..			50.00
11. Storage and Ware Houses ..			1.00
12. Rural Development & employment ..			40.00
TOTAL I (1-12)	3,015.50	2,316.16	5,589.00
13. Agriculture Credit ..	155.84	154.53	40.0
14. Co-operation ..	134.16	56.68	307.00
15. Community Development ..	100.00	85.28	53.00
16. Panchayats ..	35.00	19.11	58.00
TOTAL I 13-16)	425.00	315.60	458.00
TOTAL-I (1-16)	3,440.50	2,631.76	6,047.00

1	2	3	4	5
II. Irrigation and Flood Control:				
1. Major and Medium Irrigation	600.50	675.63	2,825.00	
2. Flood control	625.00	599.97	800.00	
3. Power	4,009.00	5,123.13	6,556.00	
TOTAL II. (1-3)	5,234.50	6,398.73	10,181.00	
III. Industry & Mining:				
1. Large and Medium Industries	391.00	274.36	909.00	
2. Mineral Development ..	216.00	202.06	425.00	
3. Village and Small Scale Industries	385.00	304.86	900.00	
TOTAL III (1-3)	992.00	781.28	2234.00	
IV. Transport and Communications:				
1. Roads ..	2,091.00	2,099.15	3,850.00	
2. Road Transport	350.00	347.53	700.00	
3. Tourism	370.00	461.22	600.00	
TOTAL IV (1-3)	2,811.00	2,907.90	5,150.00	
V. Social Services:				
1. General Education	704.00	845.11	2,038.00	
2. Technical Edu.	90.00	70.94	125.00	
3. Health ..	494.00	398.41	979.00	
4. Nutrition ..			163.00	
5. Water Supply	696.00	890.16	2,500.00	
6. Housing ..	300.00	231.50	300.00	
7. Urban Development	90.00	129.21	600.00	
8. Welfare of Backward Classes ..	60.00	51.82	120.00	
9. Social Welfare	25.00	23.07	50.00	
10. Labour Welfare and Craftsman Training ..	30.00	35.17	67.00	
TOTAL V (1-10)	2,489.00	2,675.39	6,942.00	
VI. Miscellaneous:				
1. Statistics and Planning Machinery	18.00	21.67	39.00	
2. Information and Publicity ..	13.00	26.33	40.00	
3. Special and Backward areas	800.00	680.45	3,000.00	
4. Others (Development of Govt. Presses and Metric System ..	42.00	33.02	40.00	
TOTAL VI (1-4)	873.00	761.47	3,119.00	
GRAND TOTAL (I-VI)	15,840.00	16,156.53	33,673.00	

GENERAL STATEMENT B

FIFTH FIVE YEAR PLAN

Hilly, Specially Backward Areas and Kandi Development Programme

(Rs. in Lakhs).

S. No.	Name of Backward Region.	4th Plan		Fifth Plan Outlay									
		Outlay	Likely expenditure.	Agri. & allied programmes	Medium Irrigation & Flood Control	Power (excluding major generation & Trunk transmission & distribution.)	Industry and Mining	Transport & communication	Education excluding technical education	Water supply	Other social services	Miscellaneous	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Hill area programme :													
a)	For Gujjars and Bakarwals (Five Zones of Valley) ..	N.A.	N.A.	*639.00	..	N.A.	40.00	180.00	40.00	878.16	106.00	..	1,078.16
b)	Ladakh ..	600.40	575.31	266.77	13.00	1050.00	23.00	252.23	70.00	30.00	80.22	14.78	1,800.00
	TOTAL-1 ..	600.40	575.31	905.77	13.00	1050.00	63.00	432.23	110.00	108.16	186.22	14.78	2878.16
2. Other Backward Regions :													
a)	Gurez Niabat ..	..	..	95.83	..	N.A.	N.A.	24.99	N.A.	..	N.A.	N.A.	120.82
b)	Karnah Tehsil ..	..	..	26.28	..	N.A.	N.A.	29.64	N.A.	13.00	N.A.	N.A.	68.92
c)	Matchhil ..	..	..	24.98	..	N.A.	N.A.	N.A.	N.A.	9.00	N.A.	N.A.	33.98
d)	Non-motorable (Rural) areas of												
i)	District Poonch ..	N.A.	..	116.83	48.95	N.A.	N.A.	106.64	N.A.	65.55	N.A.	N.A.	367.99
ii)	District Rajouri ..	N.A.	..	140.57	41.97	N.A.	N.A.	151.84	N.A.	129.50	N.A.	N.A.	463.88
iii)	District Doda ..	N.A.	..	145.13	20.23	N.A.	N.A.	270.08	N.A.	105.53	N.A.	N.A.	541.04
e)	Tehsil Mahore ..	..	..	61.55	..	N.A.	N.A.	77.75	N.A.	38.66	N.A.	N.A.	177.96
f)	Bani Niabat ..	..	..	44.20	0.20	N.A.	N.A.	10.68	N.A.	18.50	N.A.	N.A.	73.58
g)	Loyhi Malhar and Machhedi Patwar Halqas (Tehsil Billawar) ..	..	..	N.A.	..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
h)	Dudu-Basantgarh ..	..	..	N.A.	..	N.A.	N.A.	70.16	N.A.	8.78	N.A.	N.A.	78.94
i)	Kandi areas of :												
i)	Jammu District ..	N.A.	..	115.62	@	N.A.	N.A.	76.57	N.A.	142.53	N.A.	N.A.	594.12
ii)	Kathua District ..	N.A.	..			N.A.	N.A.	158.76	N.A.	100.64	N.A.	N.A.	
	TOTAL-2 ..	..	..	801.01	111.42	N.A.	N.A.	977.11	N.A.	631.69	N.A.	N.A.	2,521.29
	GRAND TOTAL(1+2)	600.40	575.31	1706.78	124.42	1,050.00	63.00	1,409.34	110.00	739.85	186.22	14.78	5,399.39

*Includes Rs. 50 lakhs for areas other than 5 Zones of Valley.

&To be financed from General Sectoral Programmes.

Includes Rs. 100.00 lakhs under D. P. A. P. for minor Irrigation.

Rs. 15 Crore outlay for Ravi Canal, information regarding other schemes being not readily available

GENERAL STATEMENT 'C'

5th FIVE YEAR PLAN

Physical Programmes - Targets & Achievements.

Item	Unit	1968-69	4th Plan target	'Anticipated level of achievement on 31-3-1974	5th Plan Targets
1	2	3	4	5	6
A. Agriculture.					
1. Area under Food Crops.					
a) Paddy	000 Hects.	239	n. a.	242	250
b) Wheat	-do-	185	n. a.	200	220
c) Maize	-do-	245	n. a.	276	240
d) Others	-do-	51	n. a.	54	n. a.
Total cereals	-do-	720	n. a.	772	n. a.
2. Area under High Yielding Varieties Programme.					
a) Paddy	000 Hects.	115	160	162	200
b) Wheat	-do-	36	120	120	180
c) Maize	-do-	3	20	20	60
Total	-do-	154	300	302	440
3. Area under High Yielding Varieties as percentage of total area under the Crop.					
a) Paddy	%age	48.1	n. a.	66.1	80.0
b) Wheat	-do-	19.5	n. a.	60.0	81.8
c) Maize	-do-	1.2	n. a.	7.2	25.0
4. Distribution of High Yielding Varieties/Improved Variety Seeds.					
a) Paddy	Tonnes	880	1000	3,000	6,000
b) Wheat	-do-	1462	1600		
c) Maize	-do-	134	400		
d) Bajra	-do-	4	24		
5. Off-take of Fertilizers.					
a) N	000 Qtls.	40.0	115.0	120.0	290.0
b) P	-do-	25.0	30.0	40.0	140.0
c) K	-do-	13.0	20.0	20.0	80.0
Total NPK	-do-	84.0	165.0	180.0	510.0
6. Production of Food-grains.					
a) Rice	Lakh Qtls.	45.0	48.0	44.16	60.0
b) Wheat	-do-	11.6	24.0	20.0	37.0
c) Maize	-do-	32.6	35.0	34.05	40.0
d) Others	-do-	2.8	3.0	3.0	4.0
TOTAL.	-do-	92.3	110.00	101.22	141.0

1	2	3	4	5	6	7
7. Average Yield Rate.						
a) Rice	Qtls./Hect	18.8	n. a.	18.3	24.0	
b) Wheat	-do-	6.5	n. a.	10.0	16.8	
c) Maize	-do-	13.3	n. a.	12.4	17.0	
8) Area covered under plant protection 000 Hects.						
		14.5	290.0	100.0	270.0	
9) Area covered under Soil & Water Conservation in Agricultural lands Hects.						
		15	4000	2000	12,000	
B. Horticulture.						
1. Area under Fruit cultivation 000 Hects						
		42	n. a.	61	93	
2. Horticulture Area Development.						
a) Area covered with loan assistance (additional,	000 Hects.	2.26	3.39	16.00	22.00	
b) Area covered without loan assistance (additional)	-do-	0.51	7.95			
Total (a+b)	-do-	2.77	11.34			
3. Plants distributed from Departmental nurseries Lakhs						
		2.86	n. a.	11.0	60.0	
4. Fruit Production (Fresh and dry) 000 Tonnes						
		89	n. a.	216	405	
5. Fruit Exported.						
(Fresh, dry and Jam)	-do-	62.6	n. a.	170.0	350.0	
C. Animal Husbandry and Sheep Breeding.						
1. Veterinary Hospitals and Dispensaries Nos.						
		n. a.	37	153	183	
2. Intensive Cattle Dev. Blocks -do-						
		3	10	10	15	
3. Artificial insemination centres. -do-						
		75	250	325	-	
4. Key village Blocks -do-						
		2	3	9	13	
5. Cattle Breeding Farms -do-						
		1	1	2	2	
6. Hill Cattle Dev. Centres -do-						
		..	n. a.	27	..	
7. Artificial Insemination conducted 000 Nos.						
		10	n. a.	50	355	
8. Natural service conducted 000 Nos.						
		5	n. a.	4	..	
9. Births recorded -do-						
		2	n. a.	33	89	

GENERAL STATEMENT 'C' Contd.

1	2	3	4	5	6	7
10. Milk Yield in I.C.D. Project Areas:						
a) Local cows	Lts. per day	1.5	n. a.	2.5	3.5	
b) Local Buffaloes	-do-	4.0	n. a.	5.5	6.5	
11. Milk Production Govt. farms in annually						
	000 lts.	166	n. a.	264	n. a.	
12. Production of milk in the State						
	000 Tonnes	148	180	180	225	
13. Govt. Poultry Farms						
	Nos.	2	3	9	9	
14. Govt. Sheep Breeding Farms						
	-do-	6	7	7	13	
15. Govt. Sheep & Wool extension centres						
	-do-	112	237	237	522	
16. Meat production						
	Tonnes	4529	6381	6333	8160	
17. Wool Production						
	Tonnes	1154	1450	1425	1750	
18. Wool shearing & Wool grading centres						
	Nos.	n. a.	2	2	2	
D. Co-operation.						
1. Primary Agriculture Societies:						
a) No. of societies	Nos.	1086	1104	1104	1404	
b) Member-ship	Lakhs	2.66	4.00	3.31	6.67	
c) Coverage of Agri. families/to total population	%age	34.00	43.5	43.5	100.0	
d) Share capital	Lakh Rs.	28.70	65.00	68.00	140.00	
e) Deposits/credits	-do-	7.9	10.0	14.6	..	
2. Agricultural loans advanced:						
a) Short term	Rs. in crores	0.69	4.00	4.50	12.00	
b) Medium term	-do-	0.20	0.50	1.20	3.50	
c) Long term	-do-	0.54	2.50	2.50	4.00	
3. Value of Agriculture produce marketed						
	Rs. in lakhs	36.14	n. a.	300.00	1500.00	
4. Storage capacity:						
a) Marketing godowns	000 tonnes	n. a.	n. a.	36.62	41.62	
b) Rural godowns	-do-	n. a.	n. a.	25.26	75.00	
E. Roads.						
Jammu.						
Surfaced	Kms.	1546	2015	1906	2216	
Un-surfaced	-do-	642	791	993	1403	
TOTAL	-do-	2188	2806	2899	3619	

1	2	3	4	5	6	7
Kashmir.						
Surfaced		Kms.	2149	2869	2903	3844
Un-surfaced		-do-	937	154	963	807
TOTAL		-do-	3086	3023	3899	4651
F. Power.						
1. Installed capacity	MWS	40.36	101.86	83.00	207.00	
2. Electricity generated including Power purchased from Punjab	M. KWH	198	1371	282	n. a.	
3. Villages electrified	Nos.	789	949	1412	5412	
4. Power generated.						
a) Hydel	MWS	26.92	n. a.	73.00	207.00	
b) Thermal	-do-	7.50	n. a.			
c) Diesel	-do-	5.94	n. a.			
TOTAL 4	-do-	40.36	101.86	73.00	207.00	

G. Transport (G. T. U.)

1. Goods Fleet operation	Nos.	756	159	732	968
2. Passenger Fleet operation	-do-	308	258	508	892

H. Industries.**1. Village and Small Scale Industries.**

Units registered	Nos.	50	2000	1300 + 1192*	5000
------------------	------	----	------	--------------	------

2. Industrial Estates.

Sheds allotted	Nos.	153	251	170	300
----------------	------	-----	-----	-----	-----

3. Khadi & Village Industries Board.

a) Units financed	Nos.	224	n. a.	488	500
b) Individuals financed	-do-	1	n. a.	175	300
c) Financial assistance provided	Lakh Rs.	50.77	n. a.	12.00	125.00
d) Employment	000 Nos.	34.5	n. a.	24.00	30.00
e) Wages earned	Lakh Rs.	32.13	n. a.	30.00	175.00

4. Sericulture**Production of Cocoons:**

i) Kashmir	000 Kgs.	650.49	n. a.	709.08	1332.00
ii) Jammu	-do-	206.75	n. a.	317.22	518.00
TOTAL	-do-	857.24	n. a.	1026.30	1850.00

*Under intensive campaign at Srinagar.

GENERAL STATEMENT 'C' *concl'd.*

1	2	3	4	5	6	7
5. Directorate of Industrial Training and Employment:						
a) Craftsman training Institutions in the State.	Nos.	7	7	7	9	
b) Enrolment	Nos.	815	n. a.	1288	1612	

I. Education:

General Education.

Enrolment Ratios

a) 6-11 (age group)	Boys %age	90.00	99.00	93.00	107.00
	Girls -do-	39.00	57.00	51.00	92.00
	TOTAL -do-	65.00	78.00	73.00	100.00
b) 11-14 (age group)	Boys -do-	48.00	50.00	50.00	56.00
	Girls -do-	21.00	26.00	26.00	43.00
	TOTAL -do-	35.00	38.00	38.00	50.00

1	2	3	4	5	6	7
c) 14-17 (age group)						
	Boys	-do-	28.00	36.00	36.00	50.00
	Girls	-do-	8.00	12.00	12.00	16.00
	TOTAL	-do-	19.00	25.00	25.00	34.00

d) Colleges.

(General Education)

Boys	000 Nos.	11.75	24.81	26.26	51.35
Girls	-do-	4.97	9.30	9.46	15.20
TOTAL	-do-	16.72	34.11	36.72	66.55

J. Health and Family Planning.

a) Hospitals	Nos.	22	27	28	40
b) Dispensaries including medical aid centres	-do-	530	608	666	966
c) Beds	-do-	4254	4830	4864	5559
d) Doctor Population Ratio		1:5500	n. a.	1:3015	1:3079

Chapter VI

Agriculture & Allied Programmes

I—Agriculture

The State is predominantly agriculture. 81.41 % of the total population still live in rural area whose main occupation and means of livelihood is agriculture. The problem of under employment is a common feature of the rural economy which is reflected in the large influx of working force especially from the temperate areas of the Valley, moving down to the urban areas in the sub-tropical and plains within the State and outside during the winter months. Out of the total area of 24.79 lakh hectares according to the village papers, the net area sown is 7.06 lakh hectares. This works out to 29% of the total area. As such the area available for cultivation is disproportionate to the total area of the State. The area sown more than once is 1.59 lakh hectares or 22.5% of the net area sown. As such crop intensity is by and large limited to single crop over vast areas especially in the temperate regions where geographical factors limit double cropping on account of late maturity of rabi crop and the short interval between the harvesting of the Rabi crop and the sowing or transplantation of kharif crop. The topography and agroclimatic conditions vary from place to place such as arctic cold of Ladakh, below freezing point temperature in the valley of Kashmir and sub-tropical climate in parts of Jammu. Even in the same region, lands are situated at altitudes of over 5,500 feet where the crop does not mature quickly and early onset

of winter or cold, heavily affects production. Development of agriculture is, therefore, to be directed towards raising productivity by intensive cultivation by using better and adequate inputs, evolving such strains of seed as are suitable for various climatic regions, suitable measures including in-organic ones, mechanised farming, timely credit, marketing and research.

Various schemes for increasing agriculture production were included in the Fourth Plan. The target of food production was set at 11 lakh tonnes to rise from the level of 9.23 lakh tonnes during the pre-fourth Plan. During the year 1969-70, the level of production reached to 9.7 lakh tonnes and it was 9.26 lakh tonnes during the year 1972-73. The fall in production during that year was on account of the hail storm, early snow fall and onset of early winter in the Valley of Kashmir and drought, in Jammu. For the year 1973-74 which is the last year of the 4th Plan the target of food Production was set at 11 lakh tonnes. The floods of August 1973 have affected the standing crops on vast areas affecting the production of foodgrains which is now anticipated to be 10.12 lakhs only for this year. The area brought under high yielding varieties of cereals has been increasing steadily from 1.52 lakh hectares from the pre-fourth plan to 3.08 lakh hectares ending this Plan.

In the case of chemical fertilizers the consumption level has reached 10,550 tonnes from 4,640 tonnes during the year 1969-70 and by the end of the current year the Fourth Plan target of reaching the consumption level of 15,700 tonnes is expected to go up to 18,000 tonnes of various kinds of fertilizers.

In the case of consumption of the chemical fertilizers the target set originally for the Fourth Plan had to be revised keeping in view some problems involved in its quick off-take. Various remedial measures have been taken and the Reserve Bank line of credit which had choked was re-opened in 1972 by converting the outstanding, short term loans into long term loans. Disincentive of low procurement price and compulsory repayment of loans in kind have been removed. A massive demonstration programme for use of fertilizers has been taken up. As a result of this the level of consumption of various fertilizers has started picking up.

The maize is one of the major crops in the State which requires plant protection measures so as to save it from the damage of cut worm. It is estimated that an area 4,000 hectares of each year subjected to this pest. Paddy grown above 5500 feet in Kashmir Valley is subject to blast disease and it is estimated that an area of 50,000 hectares are affected. There are other crops, such as wheat, oil seeds and vegetables which also are liable to diseases which are being identified and remedial measures taken. An Agricultural University is being set up in the State, to look after the research on temperate agriculture.

An area of 39,759 acres will be covered with fruit orchards by the end of the Fourth Plan against the original target of 70,000 acres. The shortfall is mainly due to the reluctance on the part of the farmers to borrow loans from the Land Development Banks, who are refinanced by the Agriculture Refinance Corporations, at 8%

rate of interest with 4½ % on the deferred payments. The shortfall is also due to the drought which prevailed in the State during the previous years. Attention is being paid for development of horticulture in Kandi areas of Jammu Province. Top working operation for 30,000 trees is expected to be completed by the end of the current year and sowing of seeds over an area of 300 acres, in these areas. Under the intensive fruit protection programme, the Fourth Plan target of covering an area of 50,000 acres will be achieved besides laying 578 demonstration plots. Steps are being taken to rejuvenate old Ambri, Almond and Grape plantation. Increasing number of fruit plants are being raised from the departmental nurseries. 15 lakh plants have been distributed between 1969 to 1973. The fruit canning plant in Lal Mandi has been operating and an estimated quantity of 1.06 lakh lbs. of various kinds of fruit and vegetables have been processed. Research programme on various temperate fruits has been intensified. The area under fruit plantation in the Valley of Kashmir especially in Baramulla Distt. was affected by an epidemic of scab diseases. Timely measures have been taken for extensive spraying of the areas so as to save it from the possible damage.

One of the important policy decision taken by the State Government relating to the agriculture development is to remove the ban on utilization of land under paddy for any other crop. This will enable paddy land with marginal productivity to be utilized for commercial crops.

Increase in the area under fruit cultivation and increase in the production of fruit in the State has necessitated adequate marketing for the product so as to ensure a better return for the fruit growers by direct marketing in markets of Delhi, Bombay, Madras, Calcutta etc. In the matter of development of horticulture and marketing of fruits, the Government has set up a separate department for Planning and Marketing of fruit and also set up a

Horticulture Advisory Council and a Development Committee. 13 Co-operative Societies have come up with a membership of 1200. These Societies have started, marketing the fruit after proper grading. Measures have been taken for approaching markets other with than Delhi directly and establishing links with Mandies in such areas as Bombay, Calcutta, Madras, Punjab and Gujrat. A free zone scheme for ensuring better transport facilities, has been introduced for movement of fruit outside the State. Experiments are being made for substituting the card board packing cases for the traditional wooden packing boxes so as to reduce the cost. The limit of fruit production has reached to 2.16 lakh tonnes and export from outside the State to 1.70 lakh tonnes.

Keeping in view the importance of the Parks and Gardens in the State and necessity of beautifying various places, a separate department is incharge of Parks, Gardens and Floriculture. The programme taken-up by the department include improvement of Mughal Gardens beautification of Jammu city and laying of Pandit Jawahir Lal Nehru Botanical Garden under which a rosery has been set up.

Fifth Plan

Agriculture will continue to be a priority sector in the years to come. An outlay of Rs. 90.00 lakhs Rs. 210.00 lakhs and 1255.00 lakhs has been included in the Fifth Plan for agriculture research, education and crop husbandry respectively. The Department-wise allotment is as under :-

	<i>Rs. in lakhs</i>
1. Schemes under the charge of Director Agriculture	914.15
2. Schemes under the charge of Director Horticulture	365.00
3. Schemes under the charge of Director Horticulture Marketing and Planning	150.00

	<i>Rs. in lakhs</i>
4. Parks and Gardens	50.00
5. Applied Nutrition	10.00
6. Agriculture Statistics	5.85
7. Loans to B. Sc. (Agriculture) students	10.00
8. Contribution to the Agro-Industries Development Corporation Ltd.	50.00
Total :	1555.00

The main programmes proposed to be implemented are indicated below :—

Schemes under the charge of the Director Agriculture Food Production :

Emphasis will be laid on double and multiple cropping. In the case of Kashmir Valley cultivation of wheat as a second crop will be maintained at the level 20,000 hectares. It is, however, proposed to extend the area under cultivation of oil seeds as a second crop as it matures earlier than the wheat crop. The area under this crop will therefore, be increased from 22,000 hectares to 40,000 hectares by the end of the 5th Plan. In addition, fodder cultivation during Rabi will be extended in Kashmir Valley on 4,000 hectares. In Jammu Division all parts in the sub-tropical regions except the areas which are water logged are cropped more than once. There is also scope for increasing intensity of cropping in the un-irrigated areas provided suitable soil conservation measures are adopted. It is expected to increase double cropping in the division by 10,000 hectares by the end of the next Plan.

The target of food production is set at 14.10 lakh tonnes. The cerealwise break-up of the target and the extent of the area to be covered under each crop compared

to the level to be reached by the end of Fourth Plan, is indicated below :-

Cereal	Base level 1973-74		5th Plan target 1978-79	
	Area in lakh hec.	Production in lakh tonnes	Area in lakh hec.	Production in lakh tonnes
1. Rice ..	2.40	4.416	2.50	6.00
2. Wheat ..	2.00	2.000	2.20	3.70
3. Maize ..	2.50	3.405	2.40	4.00
4. Bajra and cereals ..	..	0.300	..	0.40
TOTAL :	6.90	10.12	7.10	14.10
Pulses	..	0.30	..	0.40

High Yielding Varieties Seed

Compared to the Fourth Plan it is expected that a net addition of about 4.00 lakh tonnes in the production of foodgrains will be achieved by the end of the Fifth Plan. This works out to about 40% increase over the level expected to be reached by the end of the current Plan.

The area under the high yielding varieties of various cereal crops is proposed to be raised from 3.08 lakh hectares to 4.50 lakh hectares. This means a net increase of 1.42 lakh hectares or nearly 46% increase over the level to be reached by the end of the Fourth Plan. The extent of the area to be covered under each kind of cereal is indicated below :-

Area under the high yielding varieties.	(Lakh hectares)	
	Base level 1973-74	5th Plan target
1. Paddy	1.62	2.00
2. Wheat	1.20	1.80
3. Maize	0.20	0.60
4. Bajra	0.06	0.10
Total :	3.08	4.50

Increase in the area under improved seeds and that under the high yielding varieties necessitates availability of seeds of good quality in time. For this purpose, adequate attention will need to be paid for production of good quality seeds. There are two big seeds production farms one of Chinore (Jammu) which has an area of 3000 acres and the other Padgampora Farm in Kashmir having an area of 600 acres. Besides, there are a number of Departmental seed multiplication farms. The production capacity of all the farms is, however, limited and will not be able to meet the full requirements of improved seeds. As such it is proposed to continue during the Fifth Plan, programme of multiplication of seeds through registered growers on payments of premium. The area under the maize crops in the State comes next to paddy crop. It is, therefore, proposed to develop a suitable composite of hybrid varieties for replacing the existing varieties. Proper storage facilities will be provided at the farms. Seed processing plants would also be provided.

Fertilizers:

Consumption of fertilizers is expected to pick up. A target of 42,000 tonnes of various kinds of fertilizers has been set for the Vth Plan against the base level of 15,700 tonnes expected to be reached by the end of Fourth Plan. The components of various nutrients is indicated below :-

Consumption of Chemical Fertilizers	Thousand tonnes	
	Base level 1973-74	5th Plan target
1. Nitrogenous (in terms of N)	12.00	29.00
2. Phosphatic (in terms of P 205)	4.00	14.00
3. Potassic (in terms of K 20)	2.00	8.00
Total :	18.00	51.00

Fertilizer promotion programme has been started this year in two districts of the State. It is proposed to cover the remaining districts during the Fifth Plan.

Plant Protection

As stated earlier maize is one of the major crops which is affected by cut worm. Paddy crop sown in higher elevations is prone to blast disease. Plant protection measures as far as possible are proposed to be taken during the Fifth Plan to save these crops from the damages from pests and diseases. For this purpose adequate organization and sufficient equipments required to tackle the problems will be provided. Emphasis is proposed to be laid on organizing demonstration and arranging training to the farmers in the use of improved agriculture machinery and implements. The share capital of the Agro-Industries Corporation Limited is proposed to be supplemented by Rs. 1.50 crores by the State Govt. to enable it to increase its fleet of machinery and build cold storage and processing plants.

Commercial Crops

Under this category, development is proposed to be made in vegetable cultivation flower and vegetable seeds and Mushrooms. An area development programme for vegetable cultivation has already been taken up and it is proposed to increase the production of such vegetables as can be exported from the State to other parts of the country. Mushroom is an important item of development as it has potential for providing self employment to the youth. It is proposed to construct two Mushroom houses. The production of Mushroom is expected to reach the level of 3.50 lakhs Kgs. by the end of the Fifth Plan. The Agro-Industries Corporation Ltd. are setting up a canning unit in Srinagar which would take care of the canning of mushrooms and their marketing. Production of flower seeds will be stepped up as there is rising demand for these in the country.

Agriculture University

Problems of temperate agriculture have not received the desired attention due to lack of expertise in the State as well as rest of the country. Our development in agriculture, horticulture and fodder could have been faster if a strong research base were available to support the agriculture development programmes. It has, therefore been considered necessary that an Agricultural University is set up in the State to conduct research on problems relating to temperate agriculture not only to cater to the need of the State but the entire temperate belt of Northern India. The Agriculture College and the existing research institutions in the State will be brought under the control of the University. A detailed project is being worked out. Meanwhile an outlay of Rs. 200.00 lakhs has been included in the Plan, for the University which will be named Sadiq Agricultural University. This will be supplemented by the grants from the I.C.A.R. More funds will be needed and the position will be examined in due course.

Agricultural Extension

A scheme regarding farmers training is in operation in Jammu district under the Centrally Sponsored Programme. Because of the close link of the scheme with high yielding variety programme, it is necessary that training support is available to the programmes in all the districts of State. It is therefore proposed to provide adequate staff to meet the requirement. The two training Centres each at Malangpur and R.S. Pora need to be strengthened. The building of Malangpora School require to be renovated. This is proposed to be done during the Fifth Plan.

Development of Hilly and Backward Areas

One third of the total area of the State is hilly which has peculiar problems of its own. Maize is the principal crop grown in these

areas. It is estimated that 60,000 hectares are situated at an elevation of 6,000 where maize crop does not give good yield. Most of the area lies on steeper slopes where constant cultivation results in soil erosion. As such suitable crop pattern needs to be evolved for making best use of the agricultural lands in

these areas. Potatoes is one of the crops which can be tried in such areas. The crop yield in these areas can be increased by use of better inputs and adoption of agronomic practices. For this purpose necessary inputs will have to be provided to the people along with the training and extension work.

2-Horticulture

Horticulture Area Development Programme.

The area under fruit orchards is expected to show a substantial increase during the next Plan and a target of 50,000 acres has been set as under :—

	With loan assistance from Govt.	Through private effort	Total
Jammu	9,500	9,500	19,000
Kashmir	17,500	17,500	35,000
Total	27,000	27,000	54,000

It is proposed to provide necessary incentives to the farmers to enable them to increase area under fruit cultivation. These will take the form of subsidizing interest liability on long term loans for a period of five years to start with in support of cultivation of grapes in the sub-tropical areas of Jammu, simplification of the existing procedure for advancing of loans, adequate staffing pattern for extension and supervision better marketing facilities etc. These incentives, it is expected will go a long way encouraging extension of fruit cultivation and improvement of the existing orchards.

The farmers are hesitant in borrowing long term loans which carry interest at 8% with $4\frac{1}{2}\%$ on deferred payments. The Central team who visited the State in 1972-73 had suggested adoption of Maharashtra pattern of sharing the interest burden where rate of interest charged is $6\frac{1}{4}\%$. This rate is considered to be heavy for this

State which is hilly compared to Maharashtra. It is, therefore, proposed to subsidize the interest liability of the loanees to encourage them to borrow loans and extend fruit cultivation. The existing rate of loan related to the average @ Rs 1,000/- per acre of land is considered to be inadequate to meet the cost involved in view of the rising prices of the materials. The rate is proposed to be raised to Rs. 2,300/- per acre, for cultivation of fruits other than the grapes depending upon the size of the orchard and system of lay out.

No loan is at present being advanced for vine yards which has caused stagnation in the area under this fruit. It is proposed to provide loan assistance for cultivation of grapes in the potential areas at an average rate of 2,600/- per acre for establishment of Vine yards. The interest liability of farmers on this account also is proposed to be subsidized.

Development of Horticulture in Kandi Areas.

An additional area of 4,000 acres is proposed to be covered under top working programme.

Intensive Fruit Production Programme.

Out of the total area under orchards in the State, 50,000 acres have been taken up under the Intensive Fruit Production Programme during the IV Plan. An additional area of 61,800 acres will be covered during the V Plan. The existing staffing pattern will be modified so that more

technical staff is available to render technical advice to the farmers.

Plant Protection

It is proposed to extend the plant protection over the entire area under fruit orchards during the next plan. For this purpose required organisation will be built who will be provided with adequate facilities for mobility and equipments. Spraying pumps are proposed to be supplied to the farmers @ 33 1/3% subsidized cost through the Agro-Industries Corporation Ltd.

Other Schemes

The other Schemes relating to the development of horticulture are improvement of old departmental orchards and nurseries for production of quality material, registration of private fruit plant nurseries, horticulture information service, intensification of research on important temperate fruits, varietal trials in apples, pears and plums, research on sub-tropical and other fruit, survey of agro-climatic regions for cultivation of different kinds of varieties of fruits and trainings.

An important scheme taken up under the horticulture development relate to the walnut production which has an export market. An area of 2215 acres is expected to be covered under the schemes by the end of the IV plan. During the next plan an additional area of 20,000 acres is proposed to be covered.

Horticulture Marketing and Planning

It is expected that the quantity of fruit available for export from the State will rise to 3.50 lakh tonnes by the end of 1979-80 of which at least 1.00 lakh tonnes or 28.57% of the total exportable quantity will have to be handled by the cooperatives which will have to project as a cohesive

force in marketing operations. It is proposed to set up an Apex Cooperative Society at the provincial level with representatives of various federating units. The demand for fruit from this State is expected to increase substantially in the years to come. It is proposed to exploit such besides Delhi markets as Punjab, Haryana, Bombay, Gujarat, Hyderabad, Bangalore and Tamil Nadu. proper market surveys will be conducted. Intensive effort will be made for reaching the actual markets direct. The existing system of free zone transport from Kashmir to Delhi wherein owing to the participation of the Government Transport, rates have stabilized from Sopore to Delhi, will continue. There is, however, need for taking steps to stabilize the freight on various routes.

With the increase in the export of fruit requirement of packing boxes will increase. For the plan requirement is estimated at Rs. 7.40 lakh boxes. Experiments are being made for using cardboard boxes which cost Rs.3.75 per box. Such boxes will not, however, be able to meet the entire demand. As such wooden boxes also will be used. Mechanical grading is proposed to be introduced. Two machines have been ordered from Australia. Machines are proposed to be got prepared locally on the basis of the design of machines in Uttar Pradesh. More machines will be acquired. Each machine will have a capacity to handle 25 tonnes a day. 70 grading centres will be set up. Due attention will be paid to the planning and marketing research. The number of Fruit Growers Cooperative Societies will be increased from 13 to 50 by the end of the V plan. These societies will be provided financial assistance in the form of subsidy and share capital. Twelve additional shops are proposed to be constructed acquired outside the State. The departmental officers will be got trained in marketing 25 vegetable cooperative societies will be organised and assistance in the form of subsidy and share capital afforded to them.

3-Parks and Gardens

The outlay during the 5th plan is proposed to be utilized on completion of the works which will be carried over from the existing plan and on laying of new parks and gardens in the State.

Agro Industries Corporation Ltd:

The existing share capital base of the Corporations is Rs. 2.00 crores with 43%

and 51% share of the Central Govt. and the state Government respectively. This will be raised to 5.00 crores to enable the Corporations to meet the demand for mechanized farming supply of agricultural implements besides sinking of tube wells and setting up of agriculture based processing units and testing mechanical operations for various operations of soil conservation of agriculture lands.

1973-7

Targets and Achievements under selected programmes during the Fourth Plan

Targets and Achievements under selected programmes during the Fourth Plan

1973-74

	2	3	4	5	6	7	8	9	10	11	12
<i>Soil Conservation of Agriculture lands</i> <i>Hectres</i> ..			15	2,000	15	97	80	104	442	2,000	2,738
<i>Horticulture :</i>											
Area brought under Horticulture Area Development Programme (new orchards) with and without loan assistanc ..	Acres	11,759	39,759	6,837	5,201	3,272	4,804	6,239	13,406	39,759	
Orchard area brought unedr In- tensive Fruit Production Prog- ramme ..	-do-	..	50,000	..	3,000	..	13,000	16,000	18,000	50,000	
<i>Consumption of chemical fertilizers</i> <i>(Nutrients)</i> ..	Thousand tonnes										
a) Nitrogenous in terms of N	-do-	..	0.497	..	..	..	..	0.333	0.497	0.497	
b) Phosphatic (in terms of P2O5)	-do-	..	0.263	..	..	..	..	0.205	0.263	0.263	
c) Potassic (interms of K2O)	-do-	..	0.760	..	..	..	..	0.225	0.760	0.760	
3. Plant Protection Service ..	Acres	40,000	90,000	40,000	53,800	64,500	64,700	86,200	90,000	90,000	
<i>Horticulture Marketing :</i>											
1. Fruit production ..	lakh tonnes	..	..	..	..	..	..	..	2.16	2.16	
2. Fruit exported/marketted ..	lakh patties	..	..	..	..	..	..	..	90.00	90.00	
	-do-	..	..	..	..	..	..	..	1.70	1.70	
3. Fruit marketted by Co-operation	-do-	..	..	..	..	..	..	..	70.00	70.00	
	-do-	..	..	..	..	..	..	..	0.05	0.05	
4. Fruit growers Co-operative Societies	Nos.	..	..	..	..	..	..	..	2.00	2.00	
5. Membership of Fruit Grower Coop	-do-	..	..	..	..	..	..	..	13	13	
6. Appex Societies ..	-do-	..	..	..	..	..	..	..	1,200	1,200	
7. Fruit stores of Coop: Societies	-do-	..	..	..	..	..	..	..	1	1	
8. Fruit grading Centres ..	-do-	..	..	..	..	..	..	..	2	2	
9. Vegetable Growers Co-operative	-do-	..	..	..	..	..	..	..	7	7	
Societies	-do-	..	..	..	..	..	..	..	2	2	
10. Stores of Vegetable Growers Coop:	Nos.	..	..	..	..	..	..	..	1	1	

ANNEXURE III

Fifth Five Year Plan Targets of Crop Production for Terminal Years

Area thousand Hectares Pro-
duction thousands tonnes yield
quintals/Hectares.

No.	Item	Fifth Plan base level 1973-74			Fifth Plan Targets 1978-79		
		Area	Yield	Production	Area	Yield	Production
1	2	3	4	5	6	7	8
1. Food grains							
a) Rice ..		240	20.00	4.80	250	24.00	6.00
b) Wheat ..		200	10.00	2.00	220	17.00	3.74
c) Maize ..		250	15.06	3.90	240	16.00	3.84
d) Bajra and other cereals ..		..	..	0.30	..	..	0.40
e) Pulses ..		..	..	..	..	..	0.06
	TOTAL (I)	..	..	11.00	..	..	14.04

ANNEXURE IV
Fifth Plan Targets of Crop
Production for Five Years

S. No.	ITEM	Fourth Plan anticipated Production for 5 Year					Fifth Plan target for 5 years				
		1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12
1	Food grains lakh tonnes	9.79	9.27	9.24	9.26	10.12	11.48	12.20	12.80	13.40	14.10

Selected Targets

S. No.	Item	Unit	4th Plan base level	5th Plan Targets
1	2	3	4	5
1. High Yield in g(cereal) Varieties.				
a)	Paddy	000 hectraes	162	200
b)	Wheat	.. -do-	120	180
c)	Maize	.. -do-	20	60
d)	Jawar	.. -do-	..	..
e)	Bajra	.. -do-	6	10
			308	450
2. Consumption of Chemical Fertilizers Nutrients.				
a)	Nitrogenous (in terms of N)	000 tonnes	12.00	29.00
b)	Phosphatic (in terms of P205)	.. -do-	4.00	14.00
c)	Potassic (in terms of K 20)	.. -do-	2.00	8.00
			18.00	51.00
3. Organic Manures and Green Manuring				
a)	Urban compost	.. 000 tonnes	15.00	40.00
b)	Green Manuring	.. -do-	..	..
4. Plant Protection Consumption of Pesticides:				
		lakh acres	200	340
i)	Seed Treatment Chemicals	.. Quintals	40.00	200.00
ii)	Insecticides	.. Tonnes	100.00	1000.00
a)	Soil Insecticides	.. Tonnes	100.00	1000.00
b)	Emulsion	.. litres	800.00	5000.00
c)	Dusts	.. Quintals	300.00	3000.00
				(tonnes)
iii)	Fungicides	.. -do-	500.00	3000.00
iv)	Others —	.. -do-	5.00	300.00
a)	Rodenticides	.. -do-	5.00	300.00
b)	Weedicides	.. Litres	2000.00	5000.00
Certified Seeds				
a)	quantity distributed	..	..	..
a)	Food crops	.. 000 tonnes	3.00	6.00
b)	Others	.. -do-	..	..
6. Soil Conservation				
a)	Agricultural lands	.. 000 hectares	2.00	12.00

ANNEXURE V

S.	Item	Unit	Fourth Plan base level	V Plan Targets
1	2	3	4	5
Horticulture :				
1.	Area to be brought under Horticulture Area Development Programme (New orchards with and without loan assistance)	Acres	39,759	54,000 (Addle: area to be brought under new orchards)
2.	Orchard Area to be brought under Intensive Fruit Production Programme	Acres	50,000	61,800 Addle: estimated available orchard area to be brought under Intensive Fruit production programme)
3. Consumption of Chemical Fertilizers (Nutrients)				
a)	Nitrogenous (in terms of N)	000 tonnes	0.497	4.62 Anticipated level of consumption
b)	Phosphatic (in terms of P205)	-do-	0.263	2.304
c)	Potassic (in terms of K20)	-do-	0.760	6.925
4.	Plant Protection Service (Progressive area)	000 Hects.	36.4	Entire orchard area is to be covered under this service.
		Acres	90.000	
Horticulture Marketing.				
1.	Fruit Production	Lakh Tonnes	2.16	4.05
		Lakh Patties	90.00	168.75
2.	Fruit exported/Marketed	-do-	1.70	3.50
3.	Fruit marketed by co-operative Societies	Nos.	0.05	1.00
			2.00	40.00

1	2	3	4	5	6	7
4. Fruit Growers Coop Societies	Nos.	13	50			
5. Fruit growers co-operatives societies Membership	-do-	1200	25000			
6. Appex Societies	-do-	1	1			
7. Fruit Stores of Coop.	-do-	2	50			
8. Fruit grading centres	-do-	7	70			
9. Vegetable growers coop:	-do-	2	25			
10. Stores of Vegetable Grower Co-operatives	Nos.	1	25			

ANNEXURE VI.

Schem-wise outlay for the 5th Plan

(Rs. in lakhs)

S. No.	Head/Sub-head/Scheme	5th Plan approved outlay.			
1	2	Total	Capital	Foreign exchange	
3	4	5			
Schemes of Director Agriculture					
i. Agricultural Research and Education.					
i) Rice Research Scheme	14.25	2.16	..		
ii) Estt. of Sub-Station for maize	10.00	2.00	..		
iii) Agri. Research Unit, Jammu	5.46	3.45	..		
iv) Agri. Research Unit, Kashmir	5.88	0.90	0.20		
v) Vegetable Researches	9.41	..	..
vi) Contribution to Centrally Sponsored Schemes (Co-ordinated Research Projects)	9.00	..	..
2. Agriculture Education					
i) Agriculture College	10.00	..	..
ii) Agriculture University	200.00	..	..
Total ..	210.00	..	..
Total I	264.00	8.51	0.20		
II. Crop Husbandry.					
1) Agricultural Extension Administration.					
i) Farmers Training	4.00	..	..
ii) Agricul. Extension and Extensions Training	14.00	3.50	..		
iii) Agriculture Administration	75.00	..	..
iv) Agriculture Statistics	0.15	..	..
Total I	93.15	3.50	..		

1	2	3	4	5	6	7
2. Agriculture Inputs						
i) Seeds	a) Seed Multiplication Farm	67.00	45.00	0.40		
	b) Seed certification Scheme	3.75	..	..
	c) Premium & Subsidy on seeds	51.25	..	..
Total		122.00	45.00	0.40		
ii) Fertilizers and Manures						
	a) Subsidy on Fertilizers	70.00	..	..
	b) Soil Conditioners demonstrations	2.50	..	..
	c) Programme for urban composts in Town areas	7.50	..	..
Total		80.00	..	..
iii) Plant Protection						
iv) Agri. Implements and machinery		24.00	5.70	..		
Improved Agriculture Implements		10.00	2.80	..		
Sub-total (2):		236.00	53.50	0.40		
3. Cro-Oriented Programmes:						
i) R.A.D.P.		53.00	21.50	..		
ii) Commercial Crops:						
	a) Development of Vegetables	42.33	13.00	..		
	b) Development of Mushroom	9.67	3.20	..		
	c) Development of Floriculture	2.00	1.00	..		
Total : a, b, c & d:		54.00	17.20	..		
Total :(3) :		107.00	38.70	..		
4. Other Programmes						
Agriculture Programmes for Hilly and Kandi Areas.						
	a) Agriculture Development	14.81	..	..
	b) Potato Development	29.19	13.00	..		
	c) Subsidy on Inputs	70.00	..	..
Total :		114.00	13.00	..		
Draught prone area in Doda and Udhampur Districts. 50% contribution)		100.00	2.20	..		
Total (4)		214.00	15.20	..		
5. Contribution to Agro-Industries Dev. Corporation Ltd.						
Total Crop. Husbandry :		700.15	110.90	0.40		
Total		964.15	119.41	0.60		

S. No.	Head	5th Plan approved outlay.		
		Total	Capital	Foreign exchange.
1	2	3	4	5
Schemes of the Directorate of Horticulture				
I. Crop Husbandry.				
<i>i) Horticulture Extension and Administration.</i>				
1.	Horticulture Area Development Programme	24.77	22.08	4.04
2.	Intensive Fruit Production Programme	38.60	28.76	..
3.	Maintenance of Departmental Orchards and Nurseries	22.00	1.50	..
4.	Registration of Private Fruit Plant Nurseries	0.88	0.10	..
5.	Horticulture Information and Publication service	2.70	2.05	..
6.	Community Canning and Fruit Preservation Centre	14.70	6.50	..
7.	Survey of Agroclimatic Regions for Cultivation	3.44	..	..
8.	Horticulture Administration	77.61	..	..
Total (i) (1-8)		184.70	59.99	4.04
<i>ii) Horticulture in Hilly and Kandi Areas.</i>				
9.	Development of Horticulture in Kandi Areas of Jammu Division	8.17	0.86	..
10.	Development of Horticulture in Hilly and Backward Areas.	23.83	5.41	..
Total (ii) (9 to 10)		32.00	6.27	..
<i>iii) Crop Oriented Programme.</i>				
11.	Subsidy on account of interest on loan for establishment of new orchards/vine yards	21.40	..	..
Long term loan for extension of fruits				
iv) 12.	Plant protection service	22.90	0.45	..
<i>v) Horticulture Education and Training.</i>				
13.	Refresher course and Training in Specialized lines	6.75	..	..
14.	Training of Malies and Fieldmen	36.25	6.00	..
TOTAL (v) (13 to 14)		43.00	6.00	..

1	2	3	4	5
<i>vi) Horticulture Researches.</i>				
15.	Intensification of Research on important temperate Fruits	21.20	6.95	0.30
16.	Research on sub-tropical and other fruits	14.80	5.18	..
TOTAL vi. (15 to 16)		36.00	12.13	0.30
17.	Draught prone Areas Programme	50.00	10.64	..
GRAND TOTAL (1 to 17)		390.00	95.48	4.34
Deduct Central Share on drought prone Area programme		25.00	5.32	
Net State Plan Outlay		365.00	90.16	4.34

Schemes of the Director Horticulture

(Planning and Marketing.

1.	Administration	28.11	..	..
2.	Assistance to the Fruit and Vegetable Growers Cooperatives	65.59	..	..
3.	Area offices	17.30	5.00	..
4.	Market Complexes	38.00	38.00	..
TOTAL ..		150.00	43.00	..
Applied Nutrition Programme		10.00	..	..
Loans to Agriculture Scholars		10.00	10.00	..
Agriculture Statistics		5.85	..	..
Gardens and Parks		50.00	31.52	..
GRAND TOTAL ..		1555.00	294.09	4.94

Schemewise outlays for 5th Plan

(Rs. in lakhs)

S. No.	Head/sub-head/Scheme	5th Plan approved outlay Total	Capital	Foreign Exchange
--------	----------------------	-----------------------------------	---------	------------------

1	2	3	4	5
---	---	---	---	---

Agriculture and Allied Sectors.**3—Agriculture Research and Education.****1(A) Agriculture Research-Schemes of the Director Agriculture.**

1. Rice Research Scheme	14.25	2.16	..
2. Establishment of sub-station for maize	10.00	2.00	..
3. Agriculture Research Unit Jammu	5.46	3.45	..
4. Agriculture Research Unit Kashmir	5.88	0.90	0.20
5. Vegetable Researches	9.41	..	..
6. Contribution to co-ordinates Research Projects of the I. C. A. R.	9.00	..	..
TOTAL (A)	54.00	8.51	0.20

1(B) Schemes under the Director of Horticulture.

1. Intensification of research on important temperate fruits.	21.20	6.95	0.30
2. Research on sub-tropical and other fruits	14.80	5.18	..
TOTAL B	36.00	12.13	0.30
TOTAL RESEARCH	90.00	20.64	0.50

2—Education.**Agriculture Education.**

1. Agriculture College	10.00	10.00	..
2. Agriculture University	200.00	200.00	..
TOTAL (2)	210.00	210.00	..

II—Crop Husbandry.**1. Agriculture Extension and Administration.****(A) Schemes of Director Agriculture.**

1. Farmers Training	4.00	..	..
2. Agriculture Extension and Ext. Trg:	14.00	3.50	..
3. Agriculture Administration	75.00	..	..
SUB-TOTAL (A)	93.00	3.50	..

1	2	3	4	5
---	---	---	---	---

(B) Horticulture Education.

(a) Refresher course and Training in specialized lines	6.75	..	..
(b) Training of Malies and Field-men	36.25	6.00	..
SUB-TOTAL (B)	43.00	6.00	..

(C) Horticulture Extension and Administration.

(a) Horticulture Area Development Programme	24.77	22.08	4.04
b) Intensive Fruit Production Programme	38.60	28.76	..
c) Maintenance of Departmental orchards and Nurseries	22.00	1.50	..
d) Registration of Private fruit Plant Nurseries	0.88	0.10	..
e) Horticulture Information and Publication Service	2.70	0.05	..
f) Community canning and fruit preservation centre	14.70	7.50	..
g) Survey of Agroclimatic regions for cultivation of different kinds of varieties of fruits	3.44	..	..
h) Horticulture Administration	77.61	..	..
SUB-TOTAL (c)	184.70	59.99	4.04

D—Agriculture Statistics.

1. Schemes of Agriculture Department	0.15	..	..
2. Schemes of Revenue Department	5.85	..	..
SUB-TOTAL (D)	6.00	..	..
SUB-TOTAL (I) AGR. EXT. ADM.	326.70	69.49	..

2. Agriculture Inputs**A—Seeds**

1. Seed Multiplications farms	67.00	45.00	0.40
2. Premium and subsidy on seeds	51.25	..	..
3. Seed Certification Scheme	3.75	..	..
SUB-TOTAL (A)	122.00	45.00	0.40

(B)—Fertilizer and Mannures

1. Subsidy on fertilizers	70.00	..	..
2. Urban compost	7.50	..	..
3. Soil Conditioners demonstration	2.50	..	..
SUB-TOTAL (B)	80.00	..	..

(C)—Contribution to State Agro-Industries Corporation

(D) Plant protection (i) Agriculture	24.00	5.70	..
(ii) Horticulture	22.90	0.45	..
TOTAL (D)	46.90	6.15	..

1	2	3	4	5
(E) Agriculture implements & Machinery	10.00	2.80	..	
SUB-TOTAL (2)	308.90	53.95	0.40	
3. Crop Oriented Programmes				
i) IADP/IARP Agri. Production Progme.	53.00	21.50	..	
ii) <i>Commercial Crops</i>				
(a) Development of vegetables	42.33	13.00	..	
(b) Development of Mushrooms	9.67	3.20	..	
(c) Development of Floriculture	2.00	0.90	..	
SUB-TOTAL (II)	54.00	17.10	..	
iii) Subsidy on account of interest on loan for establishment of new orchards (Vine yards)	21.40	..	..
SUB-TOTAL (3)	128.40	38.60	..	
4. Other Programmes				
i) <i>Horticulture Marketing and Planning</i>				
(a) Administration	28.11	..	..
(b) Assistance to fruit marketing Coop. Societies	66.59	..	..
(c) Area marketing offices	17.30	5.00	..	
(d) Marketing complexes	38.00	38.00	..	
SUB-TOTAL (I)	150.00	43.00	..	
ii) <i>Gardens and Parks</i>				
a) Administration	3.00	..	..
b) <i>Improvement and dev of Mughal Gardens</i>				
i) Mughal Gardens	16.53	10.87	..	
ii) Bijbehra garden	1.23	..	..
c) N. M. Botanical garden	24.12	18.00	..	
d) Beautification of Jammu city	5.12	2.65	..	
SUB-TOTAL (II)	50.00	31.52	..	
iii) Loans to Students for higher Agricultural Education (B. Sc.)	10.00	..	..
iv) Agricultural Programme for hilly & Kandi Areas.				
a) <i>Scheme of the Agriculture Deptt:</i>				
1. Agriculture Development	14.81	..	..
2. Potato Development	29.19	13.00	..	
3. Subsidy on inputs	70.00	..	..
SUB-TOTAL (A)	114.00	13.00	..	

1	2	3	4	5
<i>b) Schemes of the Horticulture Deptt:</i>				
1. Development of Horticulture in Kandi Area of Jammu Division	8.17	0.86	..	
2. Development of Horticulture in hilly and backward areas	23.83	5.41	..	
SUB-TOTAL (B)	32.00	6.27	..	
TOTAL (iv)	146.00	19.27	..	
Applied Nutrition Programme	10.00	..	..
vi) Development of Draught Prone areas in Doda & Udhampur Distts.	125.00	2.00	..	
SUB-TOTAL-1(4)	491.00	95.79	4.44	
TOTAL II CROP HUSBANDRY	1255.00	257.37	4.44	

4. Minor Irrigation

Irrigation has been an ancient practice in the State. The consciousness of the importance of irrigation as a means to achieve an effective break-through in the development of agriculture is reflected in the will and eagerness with which some canals were constructed in the past such as Martand canal, Zaingar Khul, Lal Khul, Ranbir canal, Old partap canal and Jehlum canal. Even the plateaus at some places were brought within the scope of gravity irrigation for raising of paddy crop which with the passage of time have gone into dereliction. The paucity of resources has inhibited the effort to utilize as fully as possible the water potential available in various river basins having perennial sources for providing irrigation to dry areas for growing food and other crops for common consumption.

The aftermath of division of the country witnessed deterioration in irrigation as there was a sharp decline in the area irrigated immediately after 1947. The task for the Government was, therefore, to restore the irrigation to its peak. Along with it, it was necessary to extend irrigation by tapping natural resources in the shape of available water discharge in various river basins for providing necessary infrastructures for agricultural development, both for intensive and extensive cultivation. With this aim in view, a number of minor irrigation works were taken up during the previous plans and it is estimated that a gross area of 0.46 lakh acres and 0.45 lakh acres received irrigation benefits during the 1st and 2nd plan respectively. This area includes such agricultural land on which irrigation has been stabilized and made dependable. During the 3rd plan

execution of various minor irrigation schemes have equally benefitted by stabilization of the existing irrigation besides extension in some cases. For the 4th plan the target of acreage benefit through minor irrigation schemes was set at 82,000 Hect (potential) against which the gross utilization was expected to be of the order of 74,000 Hectare. At the end of the plan the potential created is expected to be of the order of 79,000 Hect and the gross utilisation at 71,000 Hect. As slight shortfall in the achievement of the target during the current plan is attributed to a number of strains which the entire irrigation programme had to sustain during the previous years in the form of severe droughts experienced both in Kashmir Valley and in Jammu. To meet the situation created by the adverse droughts immediate rescue measures were resorted to which took various shapes. One of these was execution of spot treatment work on Zamindari Khuls (private khuls) numbering 65, as a result of which irrigation was stabilised on an area of 0.70 lakh acres. Besides, a number of lift pumps have been installed at various places in the valley for providing water for the kharif crops. These lifts are operating as these are of immense use to the areas which are generally deficient. In the case of Jammu, a number of tube wells have been sunk in R.S. Pora and Ramgarh areas with a view to tapping the under ground water resources for providing adequate irrigation facilities for growing of food and cash crops both during the Kharif and Rabi. Besides, irrigation through Infiltration wells has been started in Jammu. The cost of maintenance of all the lift irrigation works in both the provinces of the State is, however, very high compared to the gravity

system. The higher operation charges will continue to be so, so long as electric power in abundance and at very cheap rate does not become available. This partly accounts for high cost of irrigation per acre. In the case of hilly and other backward areas, the cost of irrigation, per acre, both the capital cost and the annual maintenance cost, is high in view of the topography and other geographical features which are bound to effect the cost of material and of the labour.

4. Of the total areas sown which is estimated at 17.70 lakh acres in the State, the net area irrigated is 6.89 lakh acres or 66% only. The remaining 34% of the net area cropped is un-irrigated and put to cultivation of dry crops. The Government canals provide irrigation to total net area of 1.52 lakh acres. In the total cropped area of 21.58 lakh acres both Rabi and Kharif, the gross area irrigated for raising various crops during both the crop seasons, is 7.97 lakh acres. The total cropped area which continues to be un-irrigated and dependent on the monsoons being most unpredictable is 13.61 lakh acres or 63%. Development of irrigation by its extension to the dry area and of stabilizing the irrigation on the existing areas so as to make it more assured and sustained, depends, upon proper care of existing sources of irrigation inclusive of the private khuls commonly known in the State on Zamindari Khuls, which, at present irrigate an area of 5.19 lakh acres or 75.31%. The maintenance of the Zamindari Khuls is significant for the Kashmir Valley where these account for 84% of the total net area irrigated and 48.50% of the net area sown. Remodelling extension and reconditioning of the Zamindari khuls, which number about 2,000 in the Valley alone, are proposed to be taken over in a phased manner within the scope of technical and financial resources. This criteria, however, cannot be applied rigidly in the case of the hilly and backward areas where the command area of the Zamindari khuls is very limited but the need

is immediate for remodelling of such khuls to provide assured irrigation even to the small pieces of land so as to make best use of the available resources for development of agriculture and consequently uplift of the backward people. Special attention therefore, is proposed to be paid to the development of minor irrigation in the hilly and backward areas of the State. This will especially be true of the hilly and backward areas of Bani and Gool Gulab-garh which have so far been neglected in the development of agriculture and rapid strides are required to be made to uplift the people from their present misery and distress. A comprehensive programme of remodelling and extension of irrigation works for such areas is, therefore, one of the objectives set for the Fifth plan.

For such of the khuls, as are not comparatively speaking in bad condition and where area dependent upon them is proportionately small, spot treatment of weak points will need to be done to ensure free and un-interrupted flow of water during the peak irrigation season. Such works can, for the time being continue to be property of the village community who will have to maintain and look after them within the permissible limits. The Irrigation Department of the State Government, can, however, provide technical guidance for restoration of irrigation and for safeguarding the main Sources which should not fall into disuse. Where this is beyond the capacity of the Zamindars, Government agencies will step in to treat the weak spots.

Emphasis will continue to be laid during the Fifth plan on lift irrigation works both for extension of irrigation to the dry areas and partly stabilizing the existing areas. In the matter of tapping of ground water resources adequate attention is proposed to be paid to it both in Jammu and Kashmir. The Irrigation Departments of both the provinces, being inadequately staffed and equipped to take up extensive survey geological mapping and development of the underground water resources, active assistance of

the Central Ground Water Board is proposed to be sought to explore the potential available and the possibility of tapping it for irrigation purposes in areas which are deficient in the availability of irrigation water or which are drought prone and also in such river basins where due to low discharge irrigation is handicapped during the peak season. For this purpose, co ordination is to be ensured between the Irrigation and Geology and Mining Departments. The Government has already set up a State Level Ground Water Board

7. Minor storages, most of them rain-fed, have proved beneficial in the drought prone zones in the Valley like Rajwar, Lolab and Kandi areas of Baramulla district. During the IV Plan, storages were constructed at Cherarisharif in Srinagar Distt. and Tral in Anantnagh District. This has provided experience that there is ample scope for creating valuable potential by means of storage not only in these areas but also in such other areas as Shangas, Devsar, Shopian and Keller areas of Anantnag Distt. and a number of pockets in Kupwara, Mamhal and Kalarooch in Baramulla district. Viewing from the point of the area to be served by such storages, the targets may vary between 50 to 500. These small works will be of immense benefit to the rural economy and food production in the distress areas. During the 5th Plan greater attention will be paid in this respect.

8. Some of the existing canals and lift irrigation works passing through rugged terrain have deteriorated due to rapid depreciation in hilly and mountainous area as also soil erosion caused by heavy rains. Similarly the pumping machinery installed on some of the old lift stations has outlined their life and need to be renovated. Replacement of such machinery has to be accounted for in the outlay proposed for the Vth Plan.

9. Collection of proper irrigation statistics and their compilation according to specified standard requires considerable improvement. It is proposed to build a small organization

for verification, reconciliation, compilation and analysis of data.

10. Due to inadequate staff for surveys and investigation in the past, a number of works were taken up on the basis of preliminary surveys with the resultant revision of estimates. This situation will be remedied by providing adequate survey and investigation agency which will besides planning and projecting, collect land use data by actual reference to the field as dependence for such data on the Revenue agency is not enough.

11. For achieving optimum benefits it is proposed to maintain a close liaison with the Agriculture Department for evolving suitable cropping pattern and ensuring full and maximum utilization of the irrigation potential and also ensuring timely supply of various inputs.

12. It is not considered feasible to set up a Minor Irrigation Corporation in the State at this stage and instead all the works are proposed to be executed by the Government agency.

13. For achieving the objectives set out above an outlay of Rs. 2000.00 lakhs has been included in the 5th plan out of which Rs 1200.00 lakhs have been earmarked for Kashmir and Rs 800.00 lakhs for Jammu. Distribution of the outlay for spill over works and new works is indicated below:—

(Rs. in lakhs)				
	Spillover works	New Works	Research	Total
Jammu ..	248.12	535.96	15.92	800.00
Kashmir ..	401.44	773.56	25.00	1200.00
TOTAL: ..	649.56	1309.52	40.92	2000.00

14. An outlay of Rs. 649.56 lakhs will be required for completion of the works spilling over from the 4th Plan to the 5th Plan and Rs. 1309.52 lakhs have been provided for execution of new works besides Rs. 40.92 lakhs for research. The new works among other things include execution of minor irrigation schemes in the backward areas of

Mohare Tehsil, Poonch Distt. Rajouri Distt. Doda Distt. Handwara, Machil, Uri, upper reaches of Doru, Qazigund, Pahalgam, Beru Badgam, Ganderbal, Gurez and Kanah. Rs. 200.00 lakhs is being provided for minor irrigation under the Drought Prone Area Programme in the Doda District as a whole and part of the Udhampur District identified for the purpose of this programme. 50% of the cost, debitable to the State Plan, has been included in the 5th Plan.

15. Distribution of the outlay category-wise is indicated below:—

Nature of work	(Rs. in lakhs)		
	Total	Institutional Source	Private source.
A—SURFACED WATER SCHEMES			
1. <i>Remodelling of Kuhl</i>			
i) Spill over works	254.48	..	..
ii) New Works	352.12	..	..
2. <i>Lift works</i>			
i) Spill over works	176.23	..	..
ii) New Works	338.95	..	..
3. <i>New Canals</i>			
i) Spill over works	69.55	..	..
ii) New works	141.71	..	..
4. <i>Small Dams and Storage tanks</i>			
i) Spill over works	62.27	..	..
ii) New Works	126.70	..	..
5. <i>Others</i>			
i) Spill over works	64.13	..	..
(ii) New Works	275.04	..	..
TOTAL	1861.18	..	..
B—Ground Water Schemes			
i) <i>State tube-wells</i>			
a) Spill over works	11.20	..	..
b) New Works	41.00	..	..
ii) Dug wells	..	..	..
iii) Diesel Pumps	..	..	..
iv) Hand Pumps	..	..	..
<i>Others</i>			
a) Spill over works	11.70	..	..
b) New Work	34.00	..	..
TOTAL (B)	97.90	..	..
C—Investigation and Research	40.92	..	..
GRAND TOTAL (ABC)	2000.00	..	..

Physical Targets

16. The gross area under various minor irrigation works under the control of the Government ending 1968-69 after accounting for depreciation is estimated at 55.20 thousand hectares. By the end of the 4th Plan an additional area of 30.69 thousand hectares will be covered raising the total level to 85.89 thousand hectares. This includes substantial area on which irrigation has been stabilized and made dependable so that sustained benefits accrue. During the 5th Plan, completion of various spill-over works and execution of new works, which will start yielding benefits are estimated to cover an additional area of 55.03 thousand hectares inclusive of stabilization of over 33.00 thousand hectares of land. The gross level of area to be irrigated by various minor irrigation works through the Government agency by the end of the 5th Plan will thus rise to 140.90 thousand hectares. The period-wise and province-wise breakup is indicated below:—

Period	Acreage benefits (000 hectares)
1. Gross area under minor irrigation works ending 1968-69 after accounting for depreciation	55.20
2. Likely achievement of additional acreage benefits through minor irrigation works ending 4th Plan	30.69
3. Total level ending 4th Plan	85.89
4. Target of additional acreage benefits through minor irrigation works during 5th Plan	55.03
5. Total gross level to be reached ending the 5th Plan	140.92

Schemewise outlays for 5th Plan

(Minor Irrigation Works)

(Rs. in lacs)

S. No.	Head Sub head/Scheme:	Estimated Cost:	Anticipated expending 4th Plan expndt	5th Plan App. Outlay:		
1	2	3	4	Total Capital	F. E.	7

JAMMU DIVISION

I—Doda District:

A) Spill over Schemes

a—Remodelling of Khuls*

1.	Mandhote Khul.	6.00	3.96	2.04	2.04	..
2.	Malwana Khul	4.75	0.77	3.98	3.98	..
3.	Jathe Khul	2.40	0.50	1.90	1.90	..
4.	Right Binkud Canal.	9.46	4.70	4.76	4.76	..
5.	Malanoo Khul.	2.13	1.68	0.45	0.45	..
6.	Mona Khul.	1.24	0.74	0.50	0.50	..
7.	Pasri Khul	1.00	0.35	0.65	0.65	..
8.	Chakla Khul.	1.00	0.35	0.65	0.65	..
9.	Lopara Khul.	3.40	0.74	2.66	2.66	..
10.	Chicha Khul.	1.82	0.82	1.00	1.00	..
11.	Mandakwass Khul.	5.92	3.98	1.94	1.94	..
12.	Seeri Khul.	1.00	0.74	0.26	0.26	..
TOTAL (a) ..		40.12	19.33	20.79	20.79	..

* Spill over Schemes of the DPAP

b—Extension of Irrigation:

1.	Left Binkud Canal.	9.50	6.95	2.55	2.55	..
2.	Lower Duligam Khul	3.16	1.83	1.33	1.33	..
3.	Seeri Canal.	2.50	2.15	0.35	0.35	..
4.	Thakrai Canal.	15.69	7.08	8.61	8.61	..
TOTAL (b) ..		30.85	18.01	12.84	12.84	..
TOTAL A (a+b)		70.97	37.34	33.63	33.63	..

B) NEW SCHEMES :

(a) Remodelling:	64.70	..	41.00	41.00	..
------------------	-------	----	-------	-------	----

1	2	3	4	5	6	7
b—Extension of Irrigation:		113.50	..	55.50	55.50	..
c—Lift Irrig: Schemes:		9.00	..	9.00	9.00	..
d—Exploration & Utilisation of Ground Water:		1.00	..	1.00	1.00	..
(e) Spot treatment works.						
1. Spot treatment of various Zamindari Khuls.		5.00	..	5.00	5.00	..
TOTAL (B)		193.20	..	111.50	111.50	..
TOTAL A&B ..		264.17	37.34	145.13	145.13	..

II—UDHAMPUR DISTRICT

A. Spill over Schemes

a. Remodelling

1.	Giala Khul	2.92	1.08	1.84	1.84	..
2.	Sukhetar Khul	0.85	0.51	0.34	0.34	..
3.	Jamaslam Khul *	9.18	4.49	4.69	4.69	..
4.	Dutoor Khul *	2.46	1.72	0.74	0.74	..
5.	Lander & Deggi Khuls. *	4.88	4.50	0.36	0.36	..
TOTAL (a)		20.29	12.30	7.97	7.97	..

B. Extension of Irrigation:

1.	Panchgrain Canal	9.00	2.12	6.88	6.88	..
2.	Udhampur Panthal Canal	20.30	10.39	9.91	9.91	..
	Dharam Khul	2.39	1.70	0.69	0.69	..
TOTAL (B)		31.69	14.21	17.48	17.48	..
TOTAL (A)		51.98	26.51	25.45	25.45	..

* Spill over Schemes of the DPAP

(B) New Schemes

(a) Remodelling	123.30	..	196.30	96.30	..
(b) Extension of irrigation	38.80	..	18.00	18.00	..
(c) Lift Irrigation Schemes	14.00	..	12.00	12.00	..

(d) Spot treatment works:

1. Spot treatment of Zamindari Khuls	5.00	..	5.00	5.00	..
TOTAL (B) ..	180.30	..	131.30	131.30	..
TOTAL A&B	232.28	26.51	156.75	156.75	..

III. POONCH DISTRICT:*A-Spill Over Schemes:***(a) REMODELLING:—**

1. Sarar Khul	0.50	..	..	..	..
2. Shahi Khul	0.53	..	..	..	..
3. Potha Khul	0.25	..	..	..	..
4. Dingla Khul	1.69	..	..	..	..
5. Kunian Mag-nar Khul	0.32	..	..	..	..
6. Gagermong Khul	0.59	..	..	..	..
7. Dooni Khul	0.30	4.84	19.34	19.34	..
8. Chandak Khul	1.02	..	..	..	..
9. Gunthal Khul	0.69	..	..	..	..
10. Solab Khul	0.36	..	..	..	..
11. Jullas Khul	2.00	..	..	..	..
12. Mangnar Khul	0.96	..	..	..	..
13. Sagra Khul	1.52	..	..	..	..
14. Dudhasan Khul	0.75	..	..	..	..
15. Dhan Khul	1.00	..	..	..	..
16. Luthing Khul	0.78	..	..	..	..
17. Bera Khul	1.00	..	..	..	..
18. Ari Khul	0.30	..	..	..	..
19. Kankote Khul	0.25	..	..	..	..
20. Bijwali Khul	0.60	..	..	..	..
21. Loaran Khul	0.80	..	..	..	..
22. Sarar Hillan Khul	..	5.37	..	..	..
23. Nali Kokera Khul	..	2.00	..	..	..
24. Lower Doongi Khul	..	0.60	..	..	..
TOTAL	24.18	4.84	19.34	19.34	..

b) Extension of Irrigation:

1. Gundi Kassi Khul	0.93	0.50	0.43	0.43	..
TOTAL	0.93	0.50	0.43	0.43	..
TOTAL III (A)	25.11	5.34	19.77	19.77	..

B—NEW SCHEMES:

(a) Remodelling.	29.00	..	29.00	29.00	..
(b) Extension of Irrigation	10.00	..	10.00	10.00	..
(c) Lift Irrigation works.	20.00	..	20.00	17.00	..
(d) Spot Treatment Works. in Poonch District	15.00	..	15.00	15.00	..
TOTAL III-B	74.00	..	74.00	71.00	..
G. TOTAL III A&B	99.11	5.34	93.77	90.77	..

IV. RAJOURI DISTRICT:*A. Spill Over Schemes.***(a) Remoellding.**

1. Qasba Pain Khul	0.95	..	..	..	..
2. Saranoo Khul	0.38	..	..	..	..
3. Sidhal Khul	2.28	..	..	..	..
4. Budhal Khul	2.00	..	..	..	..
5. Sandal Khul	0.31	..	..	..	..
6. Sangpur Khul	0.39	..	..	..	..
7. Narian Khul	0.83	..	..	..	..
8. Patlar Khul	0.22	..	..	..	..
9. Seeri Khul	0.45	..	..	..	..
10. Mughal Khul	0.28	..	..	..	..
11. Chika Khul	0.53	6.60	9.73	9.73	..
12. Shingri Khul	0.85	..	..	..	..
13. Panthal Khul	0.42	..	..	..	..
14. Fathpur Khul	0.67	..	..	..	..
15. Chakli Khul	0.17	..	..	..	..
16. Numb Khul	0.70	..	..	..	..
17. Hubi Khul.	0.70	..	..	..	..
18. Nangal Dab Khul	0.70	..	..	..	..
19. Dandote Falni Khul	2.00	..	..	..	..
20. Dulma Dulbote Khul	1.00	..	..	..	..
21. Sani Sumat Khul	0.50	..	..	..	..
TOTAL (a)	16.33	6.60	9.73	9.73	..

(b) Lift irrigation Scheme:

1. Dabbar Potha Lift Scheme.	14.00	..	14.00	14.00	..
2. Thanda Pani Lift Irri. Scheme	12.00	..	12.00	12.00	..
3. Soit Lift Irri. Scheme.	29.96	11.44	18.52	18.52	..
TOTAL (b)	55.96	11.78	44.52	44.52	..
TOTAL IV-A	72.29	18.38	54.25	54.25	..

B—NEW SCHEMES:

(a) Remodelling.	29.15	..	29.15	29.15	..
(b) Extension of Irrigation.	6.85	..	6.85	6.85	..
(c) Lift Irrigation Schemes	13.00	..	10.00	10.00	..
(d) Storage Tanks Irrigation	10.00	..	10.00	10.00	..
(e) Spot Treatment Works	15.00	..	15.00	15.00	..
TOTAL IV-B	74.00	..	71.00	71.00	..
TOTAL IV-A&B	138.29	18.38	125.25	125.25	..

2	3	4	5	6	7
---	---	---	---	---	---

JAMMU DISTRICT :**Spill over schemes :***Remodling*

Mandal Khul	1.94	1.62	0.32	0.32	..
Khandwal and Chatha Khul	14.50	6.67	7.83	7.83	..
Harmukand Flora Khul	2.03	1.24	0.79	0.79	..
Remodelling of Khuls in Tawi Island	29.88	..	29.88	29.88	..
Impt. to Link Chanel from River Tawi to Khuls in Tawi Island	29.91	..	29.91	29.91	..
TOTAL (A)	78.26	9.53	68.73	68.73	..

b) Extension of irrigation :

Chak Kripa pur Khul	3.60	3.03	0.57	0.57	..
Impt. and extension of N. P. Canal	4.00	0.87	3.13	3.13	..
Gider Garlain Irrigation Scheme	3.00	..	3.00	3.00	..
Badiyal Brahmina Irrigation scheme	6.18	..	6.18	6.18	..
TOTAL (B)	16.78	3.90	12.88	12.88	..

Lift Irrigation Scheme:

Lift Irrigation Scheme Ismailpur	6.16	2.69	3.47	3.47	..
Lift Irrigation Scheme Gurah	12.50	4.03	8.47	8.47	..
Lift irrigation Scheme manda	2.00	1.16	0.84	0.84	..
Lift Irrigation Scheme Nud	3.00	1.54	1.46	1.46	..
TOTAL (C)	23.66	9.43	14.24	14.24	..

Explnation and Utilization of ground Water resources:

Drilling and Installation of Tubewells in R.S. Pora area	81.90	32.50	2.36	2.36	..
Tube-wells by percussions method (10 Nos)	26.00	13.63	8.84	8.84	..
TOTAL (d)	107.90	46.13	11.20	11.20	..
TOTAL V A	228.23	74.50	107.50	107.05	..

New Schemes

a) Remodelling	32.00	..	12.00	12.00	..
----------------	-------	----	-------	-------	----

1	2	3	4	5	6	7
---	---	---	---	---	---	---

b) Extension of Irrigation

1. Channi Gulboo Irrigation scheme	3.00	..	3.00	3.00	..
TOTAL (b)	3.00	..	3.00	3.00	..

c) Lift Irrigation schemes

d) Storage Tank Irrigation	10.00	..	5.00	5.00	..
----------------------------	-------	----	------	------	----

e) Exploration and Utilization of ground Water Resources

f) Spot treatment works	2.00	..	2.00	2.00	..
-------------------------	------	----	------	------	----

TOTAL V-B	149.00	..	79.00	79.00	..
------------------	---------------	-----------	--------------	--------------	-----------

TOTAL V (A+B)	377.23	74.50	178.05	178.05	..
----------------------	---------------	--------------	---------------	---------------	-----------

VI KATHUA DISTRICT :**(A) Spill over schemes:***(a) Extension of Irrigation*

1. Impt. of Khuls in Kathua Tehsil including Ujh Canal	15.54	5.18	5.32	5.82	..
2 Keri in Gandival Irrigation Scheme	11.80	3.90	7.90	7.90	..
TOTAL (a)	27.34	9.08	13.72	13.72	..

b) Lift irrigation Scheme:

1 Lift Irrigation scheme Jandi	0.60	0.07	0.53	0.53	..
2 Lift Irrigation scheme Dulmacak.	2.00	1.16	0.84	0.84	..
TOTAL (b)	2.60	1.23	1.37	1.37	..

c) Drainage and dewatering Scheme:

1. Anti-Water Logging in Haripur Paddal and other places	0.95	0.54	0.41	0.41	..
TOTAL (c)	0.95	0.54	0.41	0.41	..
TOTAL VI-A	30.89	11.65	15.50	15.50	..

B New Schemes (a) Remolng

b) Extension of Irrigation	30.60	..	22.38	22.38	..
----------------------------	-------	----	-------	-------	----

(c) Explotation and Utilization of ground Water Resources

d) Spot - Treatment Works	10.00	..	10.00	10.00	..
---------------------------	-------	----	-------	-------	----

TOTAL VI B	26.50	..	65.18	86.18	..
-------------------	--------------	-----------	--------------	--------------	-----------

TOTAL VI A&B	86.49	11.65	80.68	80.68	..
-------------------------	--------------	--------------	--------------	--------------	-----------

VII—Development of Kandi Area:

A—Spill over Schemes

(a) Extension of irrigation

	1	2	3	4	5	6	7
1. Naz Canal			25.78	16.30	9.48	9.48	..
2. Dudla Canal etc.			3.50	0.80	2.70	2.70	..
TOTAL (a)			29.28	17.10	12.18	12.18	..

(b) Lift irrigation Scheme

1. Lift Irrigation Sch. Mandi			4.85	4.09	0.76	0.76	..
2. Lift irrigation Sch. Kasthar			7.57	4.06	3.51	3.51	..
TOTAL (b)			12.42	8.15	4.27	4.27	..
TOTAL VII A			41.70	25.25	16.45	16.45	..

B. New Schemes :

a) Extension of irrigation			29.00	..	29.00	29.00	..
b) Lift irrigation Schemes			91.00	..	52.00	52.00	..
c) Exploration and Utilization of Ground Water Sources			10.00	..	10.00	10.00	..
TOTAL VII-(B)			130.00	..	91.00	91.00	..
Total VII (A&B)			171.70	25.25	107.45	107.45	..
GRAND TOTAL Jammu Province			1395.61	172.46	900.00	900.00	..
Deduct Central Scheme for D.P.A.P. Works in Doda and Udhampur Districts			..	..	100.00	100.00	..
TOTAL			1395.61	172.46	800.00	800.00	..

Minor Irrigation.

KASHMIR DIVISION

I—Surface Water Schemes.

A—Anantnag District

(i)—Continuing Schemes

(a)—Remodelling.

1. Waghama Zamindari Khul			5.22	4.86	0.36	0.36	..
2. Wohan Khul			10.35	3.76	6.59	6.59	..
3. Grimtio Khul			8.00	1.08	1.92	1.92	..
4. Vehrj Khul			12.85	8.16	4.69	4.69	..
5. Medura Khul			4.97	3.68	1.29	1.29	..
6. Pargan Lad Khul			6.71	3.91	2.80	2.80	..
7. Yari Khul			8.00	1.13	6.87	6.87	..

	1	2	3	4	5	6
8 Impvts. to Dadi Canal			4.91	4.73	0.18	0.18
9. Tetabuji Khul			5.00	0.20	4.80	4.80
10. Buman Khul.			4.45	1.08	3.37	3.37
11. Impvts. to Martand Canal			28.76	3.24	25.52	25.52
12. Impvt. to Chakamandi Khul			3.00	0.40	2.60	2.60
Total			97.22	36.23	60.99	60.99

(b)—Extension of irrigation

1. Reshnagri Canal			18.70	7.25	6.45	6.45
TOTAL—b			13.70	7.25	6.45	6.45

(c)—Lift irrigation Schemes:

1. Kakapora Lift Iri: Scheme			24.20	20.12	4.08	4.08
2. Tokna Lift Schemes			10.20	1.85	8.35	8.35
3. Wurahal Lift Scheme			5.37	3.96	1.41	1.41
4. Chakura Lift Scheme			3.56	1.38	2.18	2.18
5. Bijbehara Lift Scheme			7.70	2.45	5.25	5.25
6. Pohn Lift Scheme			4.75	0.93	3.82	3.82
7. Khirum Lift Scheme			29.80	0.80	29.00	29.00
8. Naina Lift Scheme			7.82	0.40	7.42	7.42
Total—c			93.40	31.89	61.51	61.51

(d)—Drainage and Dewatering Schemes :

1. Dewatering Chandhara Numbal			2.52	2.02	0.50	0.50
2. Panchpora Dew. cum-Irrigation			6.14	5.91	0.23	0.23
TOTAL—d			8.66	7.93	0.73	0.73

(e) Small Dams and St. Tanks:

1. Storage Tank Tral area Pyneer.			10.98	9.38	1.60	1.60
2. —do— at Brari Angan			2.27	1.10	1.17	1.17
3. —do— at Keller, Shadimarg, Reshinar Wanpora and Kutlar Area			10.00	0.90	9.10	9.10
TOTAL—e			23.25	11.38	11.87	11.87

(f) Installation of Pumps in drought-prone Area in Anantnag District and other places Hapatnar valley

TOTAL—f			8.56	2.00	6.56	6.56
TOTAL (i) Continuing Schemes Anantnag District			244.79	96.86	148.11	148.11

1	2	3	4	5	6	7
i) — New Schemes.						
(a) Remodelling	63.40	..	63.40	63.40	..	
(b)—Extension of irrigation	89.00	..	89.00	89.00	..	
(c)—Lift Schemes.	26.00	..	26.00	26.00	..	
(d) Renovation of Old Lift Stations.	28.00	..	28.00	28.00	..	
(e)—Drainage & Dewatering Stations.	6.00	..	6.00	6.00	..	
(f)—Small Dams & Storage tanks	25.00	..	24.00	24.00	..	
(g)—Spot Treatment Works.	5.00	..	5.00	5.00	..	
(h)—Special Tools & Plants.	5.00	..	5.00	5.00	..	
TOTAL II —New Schemes	249.40	..	249.40	249.40	..	
TOTAL Anantnag District	491.19	90.68	394.51	394.51	..	

SRINAGAR DISTRICT: Continuing Schemes.

(a) Remodelling.						
1. Lakhshmi Mavas Khul.	10.08	7.18	3.45	3.45	..	
2. Larkhul Biroo	9.67	2.60	7.07	7.07	..	
3. Gogal dara Nallah including Sunri Khul.	8.56	3.19	5.37	5.37	..	
4. Sursh Khul.	8.30	4.03	4.27	4.27	..	
5. Khanchi Khul.	6.36	5.95	0.41	0.41	..	
6. Kanir Khul.	8.80	1.00	7.80	7.80	..	
7. Arizal Khul.	5.20	0.80	4.40	4.40	..	
8. Kanz Khul.	5.40	1.00	4.40	4.40	..	
TOTAL—a.	62.92	25.75	37.17	37.17	..	
(b) Extension of Irrigation:						
1. Ahiji Canal	25.00	3.72	21.28	21.28	..	
2. Waniaram Khul	7.53	0.78	6.75	6.75	..	
TOTAL—b.	32.53	4.50	28.03	28.03	..	
(c) Small Dams & St. Tanks.						
(i)—Storage Tank at Arzan Garzan	24.37	16.89	7.48	7.48	..	
TOTAL—c	24.37	16.89	7.48	7.48	..	

1	2	3	4	5	6	7
(ii)—Installation of Pumps in drought-Prone Areas of Srinagar District						
	9.00	2.00	7.00	7.00	..	
TOTAL—(ii)	9.00	2.00	7.00	7.00	..	
TOTAL (i) Continuing Schemes	128.82	49.14	79.68	79.68	..	
(ii)—New Schemes						
(a) Re-modelling	50.00	..	50.00	50.00	..	
(b)—Extension of irrigation and improvements to existing Khuls	33.04	..	33.04	33.04	..	
(c)—Lift Schemes	38.95	..	34.95	34.95	..	
(d)—Renovation of old Lift Stations	7.00	..	7.00	7.00	..	
(e)—Drainage and Dewatering Schemes	5.00	..	5.00	5.00	..	
(f)—Small Dams & Storage Tanks	25.00	..	25.00	25.00	..	
(g)—Spot Treatment Works	4.00	..	4.00	4.00	..	
(h)—Special Tools & Plants	5.00	..	5.00	5.00	..	
TOTAL (ii) New Schemes	172.99	..	162.99	162.99	..	
GRAND TOTAL (i)&(ii) Srinagar District	301.81	49.14	242.67	242.67	..	

BARAMULLA DISTRICT: Continuing Schemes.

(a) Remodelling.						
1. Mugam Khul	4.38	1.62	2.76	2.76	..	
2. Danger Wari Khul	11.76	1.07	10.69	10.69	..	
3. Daulat Khul	4.26	4.00	0.26	0.26	..	
4. Nar Khul	3.00	2.36	0.64	0.64	..	
5. Dehgam Khul Ningli	3.71	2.07	1.64	1.64	..	
6. Impvts. to Zainagir Canal	24.00	5.89	18.11	18.11	..	
7. Impvts. to Babul Canal	10.00	0.70	9.30	9.30	..	
8. Khuls in Uri Area.						
Nambla Garkote Khul Phase II Kalji Khul—	1.66	..	1.66	1.66	..	

9. *Khuls in Teetwal area.*

i) Loontha Khul	}	6.50	3.50	3.00	3.00	..
ii) Dani Khul						
iii) Khoverpora Khul						
iv) Shahzabani Khul extension						
v) Baba Hanjinagh Khul						

TOTAL (A). 69.27 21.21 48.06 48.06 ..

b)—*Extension of Irrigation.*

1. Chakla Garkote Khul	5.40	4.26	1.14	1.14	..
2. Paranpilan Khul	8.08	3.56	4.52	4.52	..
3. Daliwas Khul Bandipora	6.22	0.63	5.59	5.59	..

TOTAL (b). 19.70 8.45 11.25 11.25 ..

c) *Lift Irri. Schemes.*

1. Lift Scheme Vedapora.	5.14	4.92	0.22	0.22	..
2. -do- Vijabal	4.30	3.28	1.02	1.02	..
3. Lift Scheme on Jhelum Basin at Sheri, Narvaw, Khadanyar and Zalkhah.	10.00	3.64	6.36	6.36	..
4. Lift Scheme on Pohru Basin Rebon, Achabal Kahipora Jagerpora.	12.00	3.69	8.31	8.31	..
5. Lift Scheme Seer Jageer.	6.00	2.00	4.00	4.00	..

TOTAL (c). 37.44 17.53 19.91 19.91 ..

d) *Small Dams & St. Tanks.*

1. Gujarnar Dam.	14.88	13.16	1.72	1.72	..
2. Golipora Storage Tank.	1.80	0.19	1.61	1.61	..
3. Storage Tanks in Rajwar Area Kikarnar, Nagradnar, Dardhanji and Rainawari and Churanar.	22.00	14.31	7.69	7.69	..
4. Storage Tanks in Handwara Area Dandasar at Uchar Magam, Mogulsar.	7.00	2.66	4.34	4.34	..
5. Storage Tank at Dogripora	9.00	4.19	4.81	4.81	..
6. Storage Tanks in Lolab area Akbarlone Sar, Masjid Sar, Doolasar, Kralasar, Doomba Sar, Gund Sar.	2.21	1.53	0.68	0.68	..

1 2 3 4 5 6 7

7. *Improvements to Storage tanks in Natnusa Area Devsar, Ganharsar, Gulabnar-Sar, Tangdarsar.*8. *Storage Tank in Gulgam area-Zabnar-Sar.*

7. Improvements to Storage tanks in Natnusa Area Devsar, Ganharsar, Gulabnar-Sar, Tangdarsar.	3.53	3.03	0.50	0.50	..
8. Storage Tank in Gulgam area-Zabnar-Sar.	1.00	0.12	0.88	0.88	..
9. -do- Rafiabab Area	0.89	0.20	0.79	0.79	..
10. -do- Impvts. in Nowdagar Sar	1.20	0.70	0.50	0.50	..
11. -do- Sahan.	3.00	0.30	2.70	2.70	..
12. -do- Chakidaipora.	0.85	0.20	0.65	0.65	..
13. -do- Haphrada	5.00	1.40	3.60	3.60	..
14. Storage Tanks Yamalar.	2.00	0.45	1.55	1.55	..
15. -do- Dadikut.	6.24	0.70	5.54	5.54	..
16. -do- Dardapora Lolab	0.80	0.30	0.50	0.50	..
17. -do- Dardapora Kashmiri	2.32	0.30	2.02	2.02	..
18. -do- Charligund	1.09	0.30	0.79	0.79	..
19. -do- Rayan Kabab-marg.	0.50	0.20	0.30	0.30	..
20. -do- Yanderhama.	2.55	0.70	1.85	1.85	..

TOTAL (d) 87.86 44.94 42.92 42.92 ..

e) *Installation of Pumps in drought prone areas.*

TOTAL (e) 7.55 0.70 6.85 6.85 ..

TOTAL (i) Continuing Scheme 221.82 92.83 128.99 128.99 ..

ii) *New Schemes.*

a) Remodelling.	69.47	..	69.47	69.47	..
b) Extension of irrigation	27.00	..	27.00	27.00	..
(c) Lift irrigation Scheme.	36.00	..	36.00	36.00	..
d) Renovation of Existing Lift Stations	16.00	..	16.00	16.00	..
e) Drainage & Dewatering Schemes.	20.00	..	20.00	20.00	..
f) Small Dams & St. Tanks	55.00	..	55.00	55.00	..
g) Spot Treatment works	5.00	..	5.00	5.00	..

8	2	3	4	5	6	7
h) Purchase of Sp. T&P	5.00	..	5.00	5.00	..	..
TOTAL-(II NEW SCHEMES	..	233.47	..	233.47	233.47	..
TOTAL-I & (II) BARAMULLA DISTT.	..	455.29	92.83	362.46	362.46	..

SONAWARI BLOCK**Continuing Schemes.***Remodelling.*

1. Impts. to Shalteng Canal Supply Channel	..	4.30	0.60	3.70	3.70	..
2. Shifting of pumps for Markundal Station	3.00	1.00	2.00	2.00	..	..
TOTAL-a	7.30	1.60	5.70	5.70	..	..

Drainage & Dewatering.

1. Borikhan Scheme	4.34	2.64	1.70	1.70	..	..
2. Sultanpora Scheme	9.00	4.00	5.00	5.00	..	..
3. Kartar Gund Scheme	2.50	0.70	1.80	1.80	..	..
4. Churthangoo Scheme	6.60	4.70	1.90	1.90	..	..
5. Gundi Daji Scheme	3.50	..	3.50	3.50	..	..
6. Gundi Ibrahim Scheme	6.00	4.94	1.06	1.06	..	..
7. Kandi Khan Scheme	3.00	0.70	2.30	2.30	..	..
TOTAL-b	34.94	17.68	17.26	17.26	..	..

Lift Irrigation Schemes.

1. Lift Scheme Achoora Gurez	3.00	1.00	2.00	2.00	..	..
2. Lift Markote	3.50	0.50	3.00	3.00	..	..
TOTAL-c	6.50	1.50	5.00	5.00	..	..

1. Installation of Pumps	6.40	1.40	5.00	5.00	..	..
TOTAL-d	6.40	1.40	5.00	5.00	..	..

TOTAL CONTINUING SCHEMES	55.14	22.18	32.96	32.96
--------------------------	-------	-------	-------	-------	----	----

ii) New Schemes

a) Remodelling.	20.00	..	20.00	20.00	..	..
b) Lift Schemes	28.00	..	28.00	28.00	..	..
-c) Renovation of Existing Lift Stations	32.00	..	32.00	32.00	..	..

1	2	3	4	5	6	7
d) Small Dams & S. Tanks.						
Small Dams & Storage Tanks in Ferozpora and Arin Basins	7.70	..	7.70	7.70	..	..
TOTAL-d.	7.70	..	7.70	7.70	..	..
e) Spot Treatment Works.	4.00	..	4.00	4.00	..	..
TOTAL-e.	4.00	..	4.00	4.00	..	..
f) Purchase of Spl. T&P	5.00	..	5.00	5.00	..	..
TOTAL-f.	5.00	..	5.00	5.00	..	..
TOTAL (II) NEW SCHEMES	96.70	..	96.70	96.70	..	..
TOTAL (I (II) SONAWARI.	151.84	22.18	129.66	129.66	..	..
TOTAL BARAMULLA DISTT.	597.13	115.01	492.12	492.12	..	..

ii—(Ground water Schemes)**ANANTNAG DISTRICT.**
Ground Water Utilisation and Exploration.**i) Continuing Schemes.**

1. Exploration of Ground Water at Tral, Khrew, Lok Bhawan, Chinari and Kilam etc. Apprex.	8.00	0.80	4.00	4.00	..	..
TOTAL ..	8.00	0.80	4.00	4.00	..	..
New Schemes	9.00	..	9.00	9.00	..	..

SRINAGAR DISTRICT.
Ground Water Utilisation and Exploration.

1. Continuing Schemes.	5.00	0.80	3.20	3.20	..	..
TOTAL- (i)	5.00	0.80	3.20	3.20	..	..
ii) New Schemes.	8.80	..	8.80	8.80	..	..

BARAMULLA DISTRICT.
Ground Water Utilisation and Exploration.*Sopore.*
Continuing Schemes.

1. Exploration of Ground Water at Rafiabab, Tiker, Shahore, Sogam and Pattan.	5.00	0.68	4.50	4.50	..	..
ii)—New Schemes	16.20	..	16.20	16.20	..	..
TOTAL GROUND WATER SCHEMES	52.00	2.28	45.70	45.70	..	..
Research & Investigation	..	..	25.00	..	..	..
TOTAL M.I. Works Kashmir Division.	1442.13	263.11	1200.00	1175.00	..	..
GRAND TOTAL J. & K.	2837.74	435.57	2000.00	1975.00	..	..

1	2	3	4	5	6	7
KASHMIR DIVISION						
Flood Control Works.						
(i)—Anantnagh District.						
(ii)—Continuing Schemes.						
1. Marginal Embankments	..	..	..	..	..	..
2. Protection of Town						
1. Protection bund around Anantnagh Town	22.00	10.08	12.00	12.00	..	..
2. Local Village Protection Works (Hyd. Division)	35.97	15.97	20.00	20.00	..	..
TOTAL—II	55.97	26.05	32.00	32.00	..	..
III. River Improvement and Anti. Erosion works						
1. Anti-erosion Works-Raising and Strengthening of banks (Hydraulic Division)	50.00	8.78	10.00	10.00	..	..
2. River Training & toe Protection Works (Hyd. Dn.)	90.00	65.17	10.00	10.00	..	..
TOTAL—III	140.00	73.95	20.00	20.00	..	..
i) Drainage Improvements						
Const. of Flood Gates, sluices and Spilways (Hydraulic Division)	11.00	9.35	1.65	1.65	..	..
TOTAL—IV	11.00	9.35	1.65	1.65	..	..
Extension water-ways	..	..	..	..	..	..
TOTAL (i) Anantnagh District (Continuing Schemes)	206.97	109.35	53.65	53.65	..	..
(ii) New Schemes						
I. Marginal Embankments.	62.00	..	32.00	32.00	..	..
II. Protection of Towns	..	..	..	..	..	..
III. River Improvement Anti-erosion works	15.00	..	3.00	3.00	..	..
IV. Drainage Improvements	..	..	..	..	..	..
V. Extension of Water-Ways	50.00	..	1.00	1.00	..	..
VI. Tidal Protection Works	..	..	..	..	..	..
VII. Anti-Sea Erosion Works	..	..	..	..	..	..
TOTAL (ii) New Schemes	127.00	..	36.00	36.00	..	..

1	2	3	4	5	6	7
B. SRINAGAR DISTRICT						
i)—Continuing Schemes						
I. Marginal Embankments	1.00	0.15	0.85	0.85	..	..
1. Plantation	..	..	..	..	..	..
TOTAL—I	1.00	0.15	0.85	0.85	..	..
II. Protection of Town	..	..	..	..	..	..
III. River Embankments and Anti-Erosion Schemes						
1. Anti-erosion Works Charari Sharief	9.00	5.55	3.45	3.45	..	..
2. Land Compensation	3.00	1.11	1.89	1.89	..	..
TOTAL—III	12.00	6.66	5.34	5.34	..	..
IV. Drainage Improvements	..	..	..	..	..	..
V. Extension of Water Way						
1. Doodganga Diversion Channel	67.95	22.48	33.47	33.47	..	..
2. Improvement to Flood Spill Channel	172.00	2.51	10.00	10.00	..	..
TOTAL—V	239.95	24.99	43.47	43.47	..	..
VI. Tidal Protection						
VI. Anti-Sea Erosion Works	..	..	..	..	..	..
VIII. Survey and Invest. (P & D Divn.)	..	..	..	..	..	..
TOTAL—B (Continuing Schemes) Srinagar District	252.95	31.80	49.66	49.66	..	..
(ii) New Schemes						
I. Marginal Embankments.	20.70	..	9.50	9.50	..	..
II. Protection of Towns	..	..	..	..	..	..
III. River Improvement and Anti Erosion Schemes.	276.00	..	15.00	15.00	..	..
IV. Drainage Improvements	..	..	..	..	..	..
V. Extension of Waterways	..	..	..	..	..	..
IV. Tidal Protection	..	..	..	..	..	..
VII. Anti-Sea Erosion	..	..	..	..	..	..
VIII. Investigation & Surveys (P&D Divn.)	46.50	..	27.00	27.00	..	..
TOTAL New Schemes Sgr. District.	343.20	..	51.50	51.50	..	..

	2	3	4	5	6	7
BARAMULLA DISTRICT:						
Continuing Schemes						
<i>Marginal Embankments.</i>						
Kahmil Basin	1.27	0.53	0.74	0.74	..	..
Vij&Hamal Basin	4.30	1.00	3.30	3.30	..	..
Farkin Basin	3.50	1.46	2.00	2.00	..	..
Qazinagh Basin	0.77	0.02	0.76	0.76	..	..
TOTAL I	9.84	3.01	6.80	6.80	..	..
II. Protection of Towns						
..
III. River Impvts.&Anti-Erosin Schemes						
..
IV. Drainage Improvements.						
I. Improvements to Outfall Channel	2200.00	1018.44	300.00	300.00	..	..
TOTAL IV	2200.00	1018.44	300.00	300.00	..	..
V. Extension of Water Ways						
Tidal Protection	..	..	..	..	..	..
VI. Anti-Sea Erosion Works						
..
TOTAL Continuing Schemes (Baramulla District)	2209.84	1021.45	306.80	306.80	..	..
ii) New Schemes						
I. Marginal Embankments.	81.00	..	36.00	36.00	..	..
II. Protection of Towns	..	..	..	..	..	..
III. River Impvts. & Anti Erosion works	..	..	..	..	..	..
IV. Drainage Improvements.	25.00	..	5.00	5.00	..	..
V. Extension of Water Ways	..	..	..	..	..	..
VI. Tidal Protection	..	..	..	..	..	..
VII. Anti-Sea Erosion (Sonawari Block)	79.00	..	25.04	25.04	..	..
TOTAL New Schemes	185.00	..	66.04	66.04	..	..
Other Flood Protection work in Border Areas.	6.35	..	4.35	4.35	..	..
GRAND TOTAL F. P. Works Baramulla District.	2401.19	1021.45	377.19	377.19	..	..
TOTAL Kashmir Division	3331.35	2069.59	568.00	568.00	..	..

	1	2	3	4	5	6	7
JAMMU DIVISION							
I—Jhelum Basin							
(A) Spill over Schemes							
I. Protection work from Kalai to Poonch on R & L Bank of Poonch River.	..	7.40	5.40	2.00	2.00	..	..
2. P. W. Bettar Nallah Poonch.	4.54	3.26	1.28	1.28	..	..	..
3. P. W. Mehdhar Nallah Surankote	4.00	1.58	1.42	1.42	..	..	..
4. P. W. Mandi to Kalai Bridge	2.00	1.25	0.75	0.75	..	..	..
TOTAL	17.94	11.49	5.45	5.45	..	..	..
B—New Schemes.	34.00	..	23.50	23.50	..	..	..
GRAND TOTAL I & B	51.94	11.49	28.95	28.95	..	..	..
II—Chenab Basin							
(a) Spill over Schemes.							
1. P.W. alongwith Waddi Tawi & Nikki Tawi consisting of spurs and Embankments for prot. to Village Channi Mukwal etc.	12.76	5.13	3.63	3.63	..	..	..
2. Const. of closure bunds with spurs for left bank of Ranbir Canal to Village Waddi Nikki Tawi	3.55	0.55	3.00	3.00	..	..	..
3. Construction of connect short circuit for a shoe curve	9.00	2.13	3.18	3.18	..	..	..
4. P. W. Saiwal and Gurah-Manhasan.	4.50	2.00	2.50	2.50	..	..	..
5. Other individual protection work on Chenab.	11.17	8.17	3.00	3.00	..	..	..
6. P. W. Darhal to Rajouri	3.00	1.88	0.80	0.80	..	..	..
7. P.W. Jamalo Tawi	1.00	0.77	0.23	0.23	..	..	..
8. P. W. Thana Mandi to Rajouri	44.47	1.30	3.00	3.00	..	..	..
9. Lohaki Prot. Bund.	9.67	7.14	2.50	2.50	..	..	..
10. P. W. Planwalla Khad chanalization upto Tawi.	5.00	1.80	3.20	3.20	..	..	..
11. Const. of 150 ft. long spur closure bund for protection of Kana-chak.	2.75	1.75	1.00	1.00	..	..	..

1	2	3	4	5	6	7
12. P. W. Rajouri to Nowashera.	2.50	1.56	0.94	0.94	..	
13. P.W. Palkhoo Nallah.	2.00	0.20	1.80	1.80	..	
14. P. W. Kherian L/S Bahlale Nallah.	1.00	0.82	0.18	0.18	..	
15. P. W. Gadi Garh Bahlale Nallah.	1.83	1.53	0.30	0.30	..	
16. P. W. Chak Kirpalpora river Chenab.	1.38	0.58	1.00	1.00	..	
17. P. W. Channi Himat	1.05	0.53	0.52	0.52	..	
18. P. W. Bishlari Nallah Banihal	4.50	3.50	1.00	1.00	..	
19. P. W. Aanji Nallah (Sukhetar)	2.25	0.50	1.75	1.75	..	
20. P. W. Agerballian Nallah	2.00	0.75	1.25	1.25	..	
TOTAL (a)	83.38	42.39	34.78	34.78	..	
P—New Schemes	243.25	..	105.65	165.65	..	
TOTAL—II—(a+b)	328.63	42.39	140.43	..	..

III—RAVI BASIN:**(a) Spill over Schemes:**

1. Construction of Embankment and Spurs on left bank of Ujh River	8.55	5.25	1.00	1.00	..	
2. P/W Basantar River D/S National Highway	4.30	3.30	1.00	1.00	..	
3. P/W R & B Ujh River I/S National Highway Bridge & D/S National Highway	24.37	19.37	8.50	8.50	..	
4. Other individual Protection works on Ravi Basin	18.88	5.90	2.75	2.75	..	
5. P/W Dudwara Billawar	1.31	1.11	0.20	0.20	..	
6. P/W Khakhyal in Kathua Town	2.39	2.12	0.27	0.27	..	
ii) P/W Nagri Wajoo						
iii) P/W Budohli						
iv) P/W SawanxVx Chak (Kathua) Khad						
v) P/W Kharar						
TOTAL (a)	65.30	39.05	13.72	13.72	..	

1	2	3	4	5	6	7
B—New Schemes	189.03	48.90	48.90	..	—	
TOTAL III (a+b)	254.33	39.05	62.62	62.62	..	
g) TOTAL Flood Works	634.90	92.93	232.00	232.00	..	
GRAND TOTAL Jammu & Kashmir	3966.25	2152.52	800.00	800.00	..	

5. Animal Husbandry

The number of cattle and buffaloes in the State is estimated at 2.2 millions. Out of this 2.52 lakh cows and 1.15 lakh buffaloes only are in milk. The State is included in the temperate Himalayan region which has a fairly heavy rain-fall, snow and frost during winter. The live-stock is largely raised on pastures and migrates to high altitude in summer and to the Valley and foot hills during winter. Cattle are generally of non-descript type with comparatively low productivity. A large percentage of live-stock is owned by migratory Gujjars and Bakarwals with practically no land holding. More than 90% of the poultry population comprises country birds which are maintained as house-hold poultry. Almost the entire cultivable area in the temperate regions is sown for food and other crops. A small percentage of the area in the sub-tropical areas is, however, sown for fodder crops. There is general scarcity of winter fodder in the temperate areas. Annual milk production ending 4th Plan is estimated at 1,80,000 tonnes. The availability per capita, works out to 100 grams. During the Fifth Plan the production is proposed to be raised to 2.25 lakhs tonnes increasing the per capita, availability of 111.00 grams by the end of 1978-79.

During the Fourth Plan two intensive cattle development projects and one medium cattle intensive development project were set up. These projects have so far covered a breedable population of 2.5

lakhs cattle and buffaloes. Another 45,000 cows have been covered under the key village scheme. Programmes relating to cattle development, fodder development, poultry, animal health, piggery, hospitals and dispensaries etc. were taken up under the Fourth Plan. A new cattle development farm has been set up in Manasbal (Kashmir) over an area of 52 acres. It is estimated that 47,000 cross breed progeny will have been born by the end of the Fourth Plan as a result of development activities of various farms. Out of this number 20,000 will be cross-breed cows with a high milk yield potential. The schemes have provided employment to farmers and live-stock owners who have taken to dairy farming as their supplementary occupation. In the field of poultry, marked progress has been made. It is estimated that the population of poultry birds of high genetic potential will increase from 20,000 during the pre-Fourth Plan period to 40,000 by the end of this Plan. Nutrition laboratories have been set up to test the quality of feed, with a view to improving the same. Poultry is developing as an industry in the State and provides employment to people who have taken to it either as a whole-time or a part-time venture. Adequate attention has been paid towards development of animal health and fully equipped laboratory has been set up for research in viral diseases. Separate investigation units for disease investigation of poultry have been set up at divisional level. One more Liver Fluke control party has been

provided for cows. Biological products laboratory is producing vaccine to meet various requirements. A deep freeze plant has been provided to the laboratory. By the end of the Fourth Plan, 153 additional veterinary dispensaries/hospitals will have been set up against a target of 179. The shortfall is due to non-availability of trained personnel. There has been shortage of veterinary personnel in the case of other schemes also. To meet the shortage large number of students have been deputed for B.V.Sc. training.

One additional sheep breeding farm and 125 sheep and wool extension centres besides two sheep shearing, wool grading and marketing centres have been set up. A large scale sheep farm has been set up at Dakasum with the Central assistance. The mutton farms have been strengthened. The production of wool at the end of the Fourth Plan is estimated at 14.25 lakh kgs. and that of meat 63.33 lakh kgs. as against 11.54 lakh kgs. during 1968-69.

5th Plan

An outlay of Rs. 455.00 lakhs and Rs. 503.00 lakhs has been included in the Fifth Plan for animal husbandry and sheep husbandry respectively. Emphasis will be laid on increasing production of milk, egg, poultry, birds, fodder, wool and meat. Steps will be taken for providing better health care and control of disease.

Cattle Development : Animal Husbandry

It is proposed to import holstein Freseian and Jersey pedigreed stock to provide breeding bulls for the intensive cattle development projects and other areas. More regional artificial breeding stations will be set up for coverage of breedable lovine population. Two units one each at Jammu

and Srinagar are proposed to be established for supply of Frozen Semen for upgrading commercial herds. Frozen Semen will have to be imported. It is proposed to locate A. I. Centres in breeding tracts in a manner that quick service is provided to far flung areas and as near the habitations of breeders as possible. During the Fifth Plan two more intensive cattle development projects and four additional key village blocks will be set up. The existing I. C. D. projects will be strengthened and the existing artificial breeding stations.

Establishment of key village blocks

There are at present 9 key village blocks, 6 in Kashmir and 3 in Jammu division. It is proposed to set up for more blocks as there are several remote and inaccessible areas which cannot be covered by I.C.D. Project. Care will be taken to separate the jurisdiction of the key village blocks from that of the I.C.D. Projects. The existing key village blocks will be expanded and the A.I. technique extended in preference to the natural coverage. The areas which cannot be catered for by A.I. techniques will however, be provided facilities under the natural coverage under the hill cattle development scheme, already existing.

Sire Evaluation Cell

It is proposed to conduct progeny tests of crossed breed cattle, in order to have, within a period of ten years, Sires of proven genetic qualities for extensive use for cattle development programme.

Feed and Fodder Development

Assistance will be provided to small and marginal farmers for rearing crossed breed heifers, in order to raise their income,

Apart from the genetic improvement of their cattle it is necessary to provide balanced cattle feed. Cost of the cattle feed will be subsidized. The feed will be got manufactured through the Agro-industries Development Corporation Ltd.

Feed and Fodder

Live stock development programmes cannot achieve tangible results unless feed and fodder is available of the required quality and quantity. Due to climatic conditions in the large part of the State, problem of providing winter feed and fodder is a serious problem. In the temperate areas cattle largely depend on paddy grass and maize stalks during the winter months as no fodder crops are generally grown during the season. The carrying capacity of pastures has also gone down due to the large number of useless cattle and over-grazing. A co-ordinated programme has been launched for development of Alpine pastures and grazing areas and stepping up research for evolving suitable grass and fodder crops seeds for winter cultivation. Due to rigorous climatic conditions, it is essential to conserve fodder by introduction of silopits and setting up of fodder banks. Demonstration plots are proposed to be laid to induce the farmers to raise fodder crops in addition to cereals and other commercial crops.

Animal Health

The ten existing hospitals will be strengthened by providing them progressively, Ray Units, and better equipment. Supply vaccine and medicine will also be improved. 10 existing dispensaries will be upgraded to the level of hospitals and 30 more Veterinary Dispensaries will be opened. 5 districts chemical laboratories and four mobile clinics will be set up. Besides, com-

paign against specific diseases will be intensified.

In order to improve the supply of technical personnel, loan assistance will be provided to scholars for under-going B.V.Sc. and post graduate courses.

Poultry Development

Intensive poultry development programme was launched in the State within a radius of 30 K.M. around the poultry project at Hariparbat (Srinagar) and Belicharana (Jammu) in the year 1968-69. Necessary infrastructure by way of birds of improved genetic make, balanced feed, marketing facilities, health cover have been provided. Two more development schemes under the S. F. D. A., M. F. A. L. were introduced. At present 4 such agencies are functioning in the State. Further development of infrastructure facilities is required to match the needs of these agencies.

Following steps, are, therefore, proposed to be taken to achieve the targets in the Fifth Plan.

- (1) Consolidation and strengthening of existing poultry development projects at Belicharana and Hariparbat.
- (2) Establishment of two new poultry development projects one each at Kathua and Baramulla.
- (3) Expansion and consolidation of district poultry farms.
- (4) Intensification of poultry breeding programme in ANP/SFDA/MFAL areas.
- (5) Intensification of Poultry breeding programmes at Hariparbat and Belicharana.

- (6) Intensification of poultry development in hilly area under cockral exchange scheme.
- (7) Providing self employment to educated and un-educated un-employed youth interested in poultry breeding under the self employment scheme by affording them necessary guidance and establishment of poultry estates.
- (8) Establishment of two farmers training institutes.

- (9) Consolidation and expansion of two poultry Nutrition analytical laboratories.

- (10) Feed supply depots.

The number of poultry marketing centres will be raised to five. Production level of one day old chicks at the Government farms will rise to 8.64 lakhs. The level of marketing of eggs will rise to 43.60. The production level of egg at the Government farms will rise to 28.80 lakhs.

6—Sheep Husbandry

Sheep and wool Development

The need for producing larger quantity of finer wool is increasing day by day. As such new production oriented schemes required to be implemented. It is envisaged to increase the production of wool and meat to 18 lac kgs. and 84 lac kgs. respectively by increase of cross breed progeny of sheep from 2 lacs by the end of the 4th Plan to 6 lacs (by the end of 5th Five Year Plan) by bringing the States 66% the total ewe population under coverage of cross-breeding and converting 60% of total sheep population into upgraded cross breed progeny of various grades.

It is envisaged that in the Fifth Plan with the expansion and completion of the development works at State Sheep Breeding Farms and Central Sheep Farm with opening of district farms, the targetted level of achievement in production of wool and mutton can be made.

The coverage of sheep population and the production of crossbreed progeny, wool and mutton will be :—

Plan:	Total Sheep popu- lation	Total ewes popu- lation	Coverage of ewes by the end of plan	Total xbrd pro- geny by the end of plan	Percentage of improv- ed sheep	Production of wool & Mutton Lakh Kgs.
	(in lakhs)	(in lakhs.)				Wool: Mutton
4th Plan	11.50	88	20	300000	26%	14.25 63.33
5th Plan	12.00	900	60	600000	50%	17.50 81.00

Coverage of Ewes under Different Organisations.

	By the end of 4th five year plan.	Additions during 5th five year plan	Total
1. Under Intensive Devt: of Sheep (Sheep projects)	125000	175000	300000
2. Under Sheep and Wool Extension Centres.	75000	215000	290000
3. Under Intensive Farmers flocks, backward areas etc.	..	10000	10000
	200000	400000	600000

The schemes, therefore, proposed for implementation alongwith their brief outlines etc. are given as follows:

Intensive Sheep Development

In addition to seven Intensive Development Blocks working at present it is envisaged to establish six more such blocks in two provinces of the State covering a total ewe population of 1,20,000 in addition to the increase of 5,500 ewe population to 1,25,000 ewes already taken up in the seven sub-blocks in the 4th Five Year Plan, thus bringing total of 3.00 lacs even under coverage. The places selected for opening of these sub blocks comprise of Bani, Madwah, Ghool-Gulab Garh in Jammu Province and Tilel, Karnah and Machil in Kashmir Province.

The expected cross breed progeny to be produced at these blocks will be to the tune of 2.4 lacs. Each block will comprise

20,000 to 25,000 ewes under cover in 20 to 25 sheep and Wool Extension Centres comprising of 1,000 ewes to be supervised by a Flock Supervisor and two shepherds. For every 10,000 ewes there will be a Veterinary Assistant Surgeon and for every 20,000 to 30,000 a Deputy Project Officer or Officer Incharge of Intensive Development Blocks.

Mutton Farm

A Station is already working in the State in Kashmir Province. Another one is proposed to be opened in Jammu Province under sub-tropical conditions. This Station will in the beginning be a small unit to conduct research experiments with mutton type of sheep. The extension of the scheme will depend upon the achievements made.

The experimental station in Kashmir required to be enlarged for arranging housing of 1,000 Down breeds for production of muttonous rams for cross breeding programme in the muttonous zone in Kashmir Valley. It is envisaged to import 1,000 Down breeds for the farm in three stages. The production of rams by the end of the 5th Five Year Plan is expected to reach 400 annually to help in coverage of 20,000 ewes in the muttonous zone.

For this adequate grazing facilities and land for fodder production housing accommodation are required 500 acres of grazing land for Spring and Autumn and 1,000 acres of Alpine land for summer grazing is required for the farm.

The production of wool from these Farms will be 0.40 lac kgs, annually at the end of plan and the increase in mutton due to infusion of muttonous blood in the muttonous zone to cover 20,000 sheep in the beginning has been dealt with separately.

Expansion of Existing Sheep Breeding Farms.

It is envisaged to make the existing Sheep Breeding Farms self sufficient as far as fodder is concerned in the Kashmir Valley and it is further envisaged that to House 1,000 breeding stock at the three Sheep Breeding Farms Kralpathri, Dachigam and Reasi of the State.

Intensive Development in Farmers Flocks

To introduce 2 lac mutton variety and dual purpose sheep in 1 lac acres of the land under orchards was envisaged in the 4th Plan of which very little work could be done and about 60 corriedale sheep have been introduced.

In the Fifth Plan it is envisaged to introduce 1,000 sheep in the orchards and run on the identical lines as Intensive Sheep Development laying emphasis on mutton development.

Expansion of Sheep and Wool Extension Centres

It is contemplated to cover 2,00,000 ewes including 75,000 ewes registered for coverage in Fourth Plan. The basic line of approach to sheep development under this scheme from that of Intensive Sheep Development is that the activities in the latter are concentrated in a contiguous belt while as the cross breeding under Sheep and Wool Extension Centres will be spread throughout the area in the district other than that taken up under Intensive Sheep Development.

172 Sheep and Wool Extension Centres are already working. This number is required to be increased to 290 by the end of the plan.

Sheep Shearing Wool Grading and Marketing

More Sheep Shearing Centres are envisaged to be opened. More equipment for

Sheering Grading etc. intended to be purchased and training facilities of shearing extended to breeders.

Establishment of District Farms

As already pointed out it is intended to set up one fine wool sheep farm in each District in which it has not been taken up. For this the Baramulla District in Kashmir Province, Rajouri, Poonch and Doda Districts in Jammu Province need be given attention.

These farms will be of the order of 'B' Class farms with 500 livestock strength in the beginning in each.

Importation of Foreign Sheep

To envisage a coverage of 6 lac ewes during the 5th plan period 12,000 rams are required out of this 4,000 rams of the 3rd breed variety required for inter breeding shall be available within the farmers flocks and for development of 4 lac ewe population, importation of 4,000 sheep is envisaged as under :—

The requirements of mutton sheep as already discussed under Experimental Mutton Farm and introduction of sheep in orchards, importation will be of the order of 2,000.

A Dairy Government Farm is proposed during the Fifth Five Year Plan with a initial stock of 300 Dairy goats.]

Improvement of Grass Land

Just as high soil fertility is essential for high crop production, so strong and healthy grass is the first necessity for high output from ruminant livestock. In our State there are numerous patches of village grazing lands but have remained in neglected condition. Similarly 10 lac acres of pastures are available at high lands and alpine but so far no attention has been paid towards there.

It is proposed to induce improvement of grass lands and pastures through the following measures :—

- (a) Rational Rotational grazing in village grass lands.
- (b) Introduction of nutritious fodders
- (c) Fertilization of pastures at alpine and high lands.

It is intended to establish one demonstration plot of 1/8th acre in each Sheep and Wool Development Centres. 600 such plots are required to be laid by the end of the 5th year plan. Seeds and fertilizers are required for the same. One field Assistant in each District to assist the Agrostologist and the Project Officer Incharge District to supervise these plots is required.

(i) Fodder Development in existing 305 acres of land available at the farms and another 200 acres proposed to be acquired at different farms shall be taken up for production of green fodder, hay and seed multiplication.

(ii) Top dressing of 17,000 acres of alpine pastures is proposed to be taken up with 8,500 quintals of D.A.P. This scheme is being looked after by the Forest Department.

Disease Investigation and District Laboratories

A Disease Investigation Wing for Sheep and Goats has been set up but is not equipped with full equipment. Staff has been got trained in techniques of laboratory material examination. This laboratory being under manned cannot cope up with all the material received from the field. Further the field staff in the Jammu Province and far flung areas of the Valley face a great handicap to despatch all morbid material to the laboratory.

As such it is envisaged to have a second disease investigation laboratory in the Jammu Province and small laboratories with needed equipment attached to the Project Officers Incharge.

Statistical Cell

Recently established statistical cell is essential for collection, compilation and analysing of the technical and other records for assessment of the achievements made in the field and also shall watch over the progress of plan schemes with targeted in-puts and out-puts.

This cell requires to be strengthened by adequate staff and equipment.

Publicity Wing

This wing requires to be adequately manned and equipped to form a medium between the department and the public at large and is required to help in disseminating the knowledge to the larger benefits of livestock breeders by new extension methods. The knowledge which is out from the portals of our department and research farms and the objects behind every programme is required to be extended to the threshold of every villager in his development programmes.

Sheep Breeders Co-operative Society and Associations

It is intended to set up a Kashmir Merino Sheep Breeding Association one in each District of the Valley to help in speedy development of the sheep to provide advertisement media for interpretation of the schemes to the breeders. Meetings, seminars and sheep shows shall be held under the scheme to bring in changes in the philosophy, approach, concepts of thinking and planning and also to create enthusiasm within the breeders to enable them to chillo down their age old practices of rearing, shearing and managing sheep and marketing of their products. This

will also help in creating confidence in a farmer to take up the programme whole heartedly.

Farm advisory services and farm improvement club are also proposed to be taken up.

Intensive Muttonous Zone

The demands for mutton in the Valley are increasing day by day as the standard of living is taking rapid strides. Our sheep being low in standard, a sheep breeder is not in a position to rear sheep which will fetch him an economic out turn in mutton. The introduction of merino blood has steadily contributed to the larger outputted from the sheep in terms of wool and mutton to breeder. The objective of economic out-puts from a sheep obviously necessitates the successful raising of maximum number of efficient sheep.

It is envisaged, as such to organise and establish a muttonous zone in the Valley where the achievements made in the State. Experimental station could be carried with benefit. This scheme will be run on similar pattern as Intensive Sheep Development Scheme to help produce fat lambs from the farmers flocks for the markets in towns and cities.

In the beginning 50,000 sheep shall be taken under the purview of this scheme and muttonous rams available with the Sheep Husbandry Department shall be introduced for crossbreeding with $\frac{1}{2}$ bred (crossbred sheep) of the area for which primarily merino blood will be introduced.

It is estimated that 5,000 fat lambs shall be available for the market a dressed weight content of 75.000 kgs. annually at the end of the plan period.

Community Wool Scouring

With the introduction of merino blood

the greese content of wool in sheep gets increased. This wool greese being natural alongwith other acquired and applied impurities pose a problem for our breeders who intend to use the cross bred wool for apparel making at home. These impurities which may comprise 30 to 60% of the greesy weight from the wool requires some what improved technique. Wool scouring is a very important process to a layman because of the tremendous change in appearance of the wool and to the Technologist because of the dangers of chemical damages and of felting to which the wool is exposed during the process.

It is, therefore, envisaged to establish one wool scouring unit in each province which will move from District to District village to village where sheep development activities have been undertaken to educate the masses regarding scouring of wool.

On mobile van, two laboratory assistants and some attendants required with camp equipment shall be necessary for the scheme.

Expansion of Fleece Testing Laboratories

Qualitative assessment of wool is as important as the breeding of sheep itself. The estimation of fibre quality is to be undertaken at every generation to find out the quality of wool produced from different areas of the state and to help in assessment of total wool of different qualities produced in the state. Wool analysis will also help the producers in marketing their products.

The Fleece testing Laboratory working at present required to be enlarged, strengthened and provided with more trained staff to cope up with the work. Field staff for collection of samples from the field also required to be commissioned to offer a complete analysing services to the wool grower. One such laboratory re-

quires to be established in Jammu provinces.

At district level it is intended to procure wool samples for analysis through field organisation and the fleece testing laboratory will be fed with regular supplies of such samples.

It is proposed to upgrade the farms to 'A' class farms.

Adequate housing facilities to accommodate 1000 breeding stock at these farms—accommodation for the staff, purchase of land for fodder productions arranging controlled and exclusive grazing rights and other facilities are the prerequisites.

The production of rams from the farms will be 1000 rams at the end of the plan period to help in giving coverage for 50,000 ewes in the field.

Intensification of Backward Pocket Sheep & Area Development

To extend the development activities to for-flung and neglected areas of the state, it is proposed to introduce and intensify Sheep development activities to such areas. Areas like Pogal Paristan padder and other such areas will be taken in hand. The people in these areas being the most backward section of the community have very little contacts with the people living in low lands leading a neglected life and receiving little attention. It is envisaged to have a separate organisation under the Project Officer Incharge Districts and to run sheep development scheme to be organised on the same pattern as a Intensive Sheep Development scheme but the difference will lie in the set up of supervisory organisation.

Three such pockets are required to be touched. The organisation will be headed by the Veterinary Assistant Surgeon in each such pocket and the field staff will be

of the pattern of other sheep and wool Extension Centres.

Feed Manufacture and Utilization

It is intended to establish a central feed manufacturing unit where all required ingredients can be mixed to form pellets and to present to the consuming units of the department in a ready to use form to avoid wastage. This unit will be run at no loss no profit basis to the Government institutions and to the private breeders. Under the scheme feed grainders and mixers shall also be provided at district headquarters for utilization by the departmental agencies and private breeders.

Setting up of a Quarantine Station

It is intended to establish one quarantine station and stock yard facility at Lakhanpur (Jammu) where sheep coming from other states could be quarantined for a required period and then allowed to enter the state for slaughter and other purposes.

Procurement of class Sheep from the Field

In order to bridge the gap between the utilization of purchased exotic sheep and the requirement of rams in the field, it is proposed to purchase 4000 rams with 75% Merino blood and of high grade for use in the flocks possessing $\frac{3}{4}$ th breed progeny for inter breeding. These rams will also be used in the field for upgrading of local sheep where the exotic stock can not be introduced. Further purchase of surplus cross breed female progeny from the breeders and distributing these on barter deal (Sheep for Sheep) or on subsidised cost to the breeders of sheep who intend to achieve quick development of his flocks is envisaged.

This process of procurement will help

in :—

(a) Providing marketing facilities for the graded stock of sheep.

(b) help in supply of graded sheep to other states where needed.

Ram depots under the scheme shall be opened to arrange regular procurement and sale of sheep to other.

Establishment of Transit Camps for Migratory Breeders and Flocks

Two such camps have been established so far under this scheme. The function of these camps is to provide on spot health cover to the migratory flocks which constitute the bulk of the sheep population.

Eight such transit camps are envisaged in the Fifth five year plan to provide look after of the flocks of migratory breeders, migrating in different directions.

Strengthening of Organisation

With the expansion in the activities of the Department it is necessary to strengthen the administrative organisation by providing a tier at the Divisional level, besides some posts for improving the work of the organisation.

Establishment of a Dairy Goat Farm

Setting up of Goat Development Farm is envisaged. Under this scheme dairy goats from any friendly country shall be imported to form the foundation stock and experiments regarding management diseases, feeding shall be conducted. The achievements made in the farm shall be carried to the field by gradual sale of dairy goats to the interested breeders.

Angora Rabbit Farm

The scheme requires re-organisation

expansion and consolidation as the results of the experiments come to fore. The stock is expected to be imported this year and the results shall be available in the beginning of the 5th plan.

Mass Drenching and Dipping of Sheep

The endo and ecto parasites play an important role in lowering the activity of sheep thereby reducing their health and production of meat and wool and also increase mortality.

It has been estimated that the endo parasites decrease the meat and wool content of the sheep by about 30% and the mortality due to such causes has been estimated at 20%.

To decrease the mortality of sheep and increase their power of production in respect of wool and meat, it is envisaged to drench all the 6 lac sheep under the purview of development with broad spectrum anthelmintics and conduct regular dipping of sheep to eradicate ecto parasitism.

Artificial Insemination

Two centres have already been set up in the 4th Plan. It is proposed to increase the No. of such centres to 9 to work in each district to augment cross breeding work.

Training of Sheep and Wool Workers

For successful implementation of breeding plan in the Intensive Sheep Development and Sheep and Wool Extension service it is essential to exercise a close supervision of the breeding task under taken and to provide health cover and maintain all technical records at breeding flocks day in and day out. For this newly recruited flock supervisors and in service field staff requires to be trained to ensure

smooth covering of the breeding operation, treatment of diseased sheep, mass drenching and allied programmes. Under the programme 800 men are to be recruited and trained within 5 years of the scheme as Sheep and Wool Workers, Shearers, Graders and Laboratory workers.

Scheme-wise outlays for various Sheep and wool development schemes are indicated below :—

11. The cumulative effect of development of animal & Sheep husbandry will result in the production of:—

	Unit	Level ending IV Plan	5th Plan target
Milk	(000) tonnes	180	225
Wool	(000) Kgs.	1425	1750
Egg	Lakh Nos.	1750	2500
Meat	(000) Kgs.	6333	8100

ANNEXURE 1

ANIMAL HUSBANDRY

Targets and Achievements in respect of Live Stock products

S No.	Item	Unit	Fourth Plan Achievements			
			Base level (assumed) 1968-69	Target	Actuals 1968-69	Likely achievements 1973 74
1.	Milk	(000) tonnes.	148	180	143	180
2.	Wool	(000) Kgs	1154	1497	1154	1425
3.	Eggs	Lakh Nos.				
4.	Meat	(000) Kgs	4529	6381	5457	6333

ANNEXURE II

**Targets Achievements during 4th Plan
relating to Physical Programmes of
Animal Husbandry and Sheep
husbandry**

S. No.	Item	Fourth Plan		Likely achiev- ements
		Level 1968-69	Target 1973-74	
1.	Intensive Cattle Dev- lopment Projects	—	3	3
2.	Key Village Blocks	9	—	—
3.	Cattle Breeding Farms	2	3	3
4.	Fodder Seed Produc- tion Farms	—	—	4
5.	Sheep Breeding Farms	6	7	7
6.	Sheep and Wool Ex- Centres	112	232	237
7.	Sheep Shearing. Wool grading and market- ing Centres	—	2	2
8.	Becon Factories	—	—	—
9.	Piggry Development	—	—	—
10.	Poultry Breeding Farms	2	3	9
11.	Intensive Egg and Poultry Production- cum-Marketing Cen- tres	—	2	2
12.	Veterinary Hospitals)	142	179	153
13.	Veterinary Dispensaries)			

ANNEXURE III

TARGETS OF LIVESTOCK PRODUCTS

S. No.	Item	Unit	Base level 1973-74	Target 1978-79
1.	Milk	(000) Tonnes	180	225
2.	Wool	(000) Kgs.	1425	1750
3.	Eggs	Lakh nos.	1750	2500
4.	Meat	(000) Kgs.	6333	8100

ANNEXURE IV

Targets of Physical Programmes for 5th Plan

S.No.	Item	Base level 1973-74	5th Plan target 1978-79
1.	Intensive Cattle Dev. Projects	3	2
2.	Key Village Blocks	9	4
3.	Cattle Breeding Farms	3	..
4.	Fodder Seed Production Farms	2	4
5.	Sheep Breeding Farms	7	13
6.	Sheep and Wool exten- tion Centres	237	522
7.	Intensive Sheep Dev. Projects	7	13
8.	Sheep Shearing Wool grading cum-Marketing Centres	2	2
9.	Poultry Breeding Farms	3	6
10.	Intensive Egg Poultry Production cum-Marke- ting Centres	2	2
11.	Poultry C-cooperatives		
12.	Poultry Breeding Farm	9	9
13.	Production cum-Marke- ting Centres	2	5
14.	Average layers to be maintained	6000	16000
15.	Pig Breeding Farms	—	1
16.	Production of one day old chicks at Govt. Farms	3,00,000	8,64,000
17.	Marketing of eggs	24,40,000	43,60,000
18.	Production of eggs at Govt. Farms	10,80,000	28,80,000
19.	Veterinary Dispensaries }		
20.	Veterinary Hospitals }	153	30
21.	Upgrading of existing Dispensaries	..	10
22.	Mobile Vettry. Disp.	...	4
23.	Cross bred-animals	15,000	1,07,000
24.	Vaccination inoculations	11,00,000	22,00,000

7. Dairying and Milk Supply.

Two milk supply schemes one each with an installation capacity of handling 10,000 litres of milk per day, have been set up in Srinagar and Jammu. The former came into being during the Third Plan while the latter in the Fourth Plan. The schemes are not, however running at their full capacity at present. The existing capacity of handling is 4000 litres for each of the schemes 4,000 litres of milk, per day. The short fall in the productive capacity is mainly due to non-availability of milk. For increasing the yield of milk, two I.C.D.P's

and one medium I.C.D.P. have been commissioned during the Fourth Plan. Besides, the hill cattle development scheme and the key village schemes were completely re-organised.

Fifth Plan

An outlay of Rs. 60.00 lakhs has been included in the 5th Plan for dairying and milk supply. The programme mainly relates to the following :—

	(Rs. in lakhs.)		
	Total	Capital	Foreign Exchange
1. Extension and consolidation of the existing milk supply scheme of Srinagar and Jammu, including rural dairy extension.	40.00	8.00	4.00
2. Removal of urban cattle.	5.00	1.00	..
3. Establishment of two creameries.	10.00	2.00	..
4. Re-organisation of dairy cooperative societies by providing assistance in the shape of loans, dairy cows, feed subsidy, dairy articles, etc. Facilities will also be provided for increasing dairy production and arrangement for marketing, extension service and organisation of cattle market and mandies.	5.00	..	..
Total	60.00	11.00	4.00

ANNEXURE (I)

Dairying and Milk Supply

Fourth Plan Targets and Achievements

Item	Base level 1968 1969	Targets 1973-74	Anticipated achievements 1973-74
1. Milk Plants (including composite Milk Plants) in operation :			
a) Numbers	1	2	2
b) Capacity in litres daily	10,000	20,000	20,000
c) Actual Processing		8,000	8,000
2. Milk product Fabrics (including creameries) in operation :			
a) Numbers	..	1	1
b) Capacity in litres	..	10,000 daily	5,000 daily
3. Rural Dairy centres in operation :			
a) Numbers	..	..	..
b) Capacity in litres	..	..	..
4. Dairy Cooperatives :			
a) Primary Societies			
i) Numbers	..	..	..
ii) Total membership	..	..	..
b) Unions (Nos.)	..	..	..
c) Quantity of milk handled (litres)	..	..	..

ANNEXURE (II)

Dairying

FOURTH PLAN—Progress of Utilisation of Capacity of Milk Plants/Milk Product Factories.

Location of Plant factory	Year of instal- lation	Instal- led capacity in lit. per day 1968-69	Utili- sation level 1968- 69	Actual utili- sation level 1971-72	Anti- cipated utili- sation level 1972-73	Likely utili- sation level 1973-74
1. Milk Supply Scheme SRINAGAR.	1961	10,000 lits :	2,000 lits :	2,500 lits :	3,000 lits :	5,000 lits :
2. Milk Supply Scheme JAMMU	1971	—	—	—	4,000 lits :	5,000 lits :

ANNEXURE (III)

FIFTH FIVE YEAR PLAN
Targets of Dairy Industry

Item	Base level 1973-74	Targets level 1978-79
1. Milk Plants (including composite milk plants) in operation :—		
a) numbers	2	3
b) capacity in lits : per day	5,000	10,000
2. Milk product factories in operation :		
a) numbers	1	2
b) capacity in lits : per day	20,000	20,000
c) actual processing	8,000	20,000
3. Rural Dairy centres :		
a) numbers	..	..
b) capacity in lits ; per day.	..	..
4. Dairy Cooperatives :		
a) Primary societies		
i) numbers	..	..
ii) total membership	..	..
b) Union (Nos.)	..	..
c) Quantity of milk handled in lits :	..	..

ANNEXURE (IV)

FIFTH FIVE YEAR PLAN—Targets of
Dairy Programmes/Projects

Item	Targets 1974-79
1 Number of Milk Plants (including composite milk plants) spiling into the Fifth Plan and to be commissioned during the Fifth Plan.	—
2 Number of existing milk plants which are proposed to be taken up for expansion during Fifth Plan	2
3 Number out of (2) above where expansion is proposed to be completed during the Fifth Plan.	2
4 Number of new milk plants proposed to be taken up during the Fifth Plan.	1
5 Number out of (4) above which are proposed to be completed during Fifth Plan	1
6 Number of new milk product factories, proposed to be taken up during the Fifth Plan.	1
7 Number out of (6) above, which are proposed to be completed during the Fifth Plan	1

ANIMAL HUSBANDRY

Schemewise outlay for 5th Plan

(Rs in lakhs)

S. No.	Head/Sub-heads/Scheme	5th Plan approved outlay		
		Total	Capital	Foreign Exchange
1	2	3	4	5
Animal Husbandry				
Cattle Development				
1	Strengthening of 3 existing Cattle Development Project ..	15.00	5.00	3.00
2	Strengthening of New Intensive Cattle Dev. (Medium Project) ..	50.00	9.00	..
3	Assistance to small and Marginal Farmers and Agricultural Labourers for rearing of cross breed heifers. ..	30.00	..	..
4	Strengthening of cattle Breeding Farms ..	14.00	4.00	4.00
5	Import of exotic cattle ..	12.00	..	3.00
6	Expansion of New Key village blocks ..	20.00	4.00	..
7	Strengthening of Hill Cattle Development scheme and Artificial Breeding Station ..	5.00	1.00	..
8	Training of Technical personnel (Stockmen Training) ..	4.00	..	..
9	Purchase of Buffalo/Bulls ..	0.60	..	..
10	Establishment of new Key village Blocks ..	17.40	4.00	..
11	Sire evaluation cell ..	2.00	..	..
TOTAL I ..		170.00	27.00	10.00

II—Feed and Fodder Development

1	Fodder Demonstration and extension ..	6.00	2.00	..
2	Establishment of two Fodder Banks ..	8.00	2.00	..
3	Feed Mixing Plant (equity capital Contribution) ..	10.00	3.00	..
4	Strengthening of Feeder Development staff ..	4.00	1.50	..
5	Establishment of two fodder seed production farms ..	8.00	4.00	..
TOTAL II		36.00	12.50	..

1	2	3	4	5
---	---	---	---	---

III—Poultry Development :

1	Strengthening of I.P.D. Project ..	10.00	6.00	..
2	Establishment of 3 Intensive Poultry Development Projects ..	23.00	9.00	..
3	Strengthening of 9 Poultry Farms ..	19.00	3.00	..
4	Intensive Broiler raising Project ..	8.00	3.00	..
5	Poultry Development in areas ..	3.00	..	..
6	Farmers Training centre ..	1.00	..	..
7	Self Employment Poultry estate ..	5.00	3.00	..
8	Consolidation of feed analysis ..	2.00	1.00	..
9	State Marketing Federation ..	3.00	1.00	..
10	Expansion of Duck Farms ..	5.00	2.00	..
11	Duck distribution programme ..	2.00	..	..
12	Strengthening Supervisory Organisation ..	3.00	1.00	..
TOTAL—III		84.00	29.00	..

IV—Animal Health

1	Strengthening of 10 existing Hospitals ..	4.00	1.00	..
2	Upgrading of 10 existing dispensaries into Hospitals ..	6.50	2.00	..
3	Establishment of 30 new Veterinary dispensaries ..	36.00	10.00	..
4	Establishment of 5 Distt. Chemical Laboratories ..	5.00	2.00	..
5	Establishment of 4 mobile clinics ..	6.00	..	..
6	Strengthening of Disease investigation Laboratories ..	9.00	3.00	..
7	Strengthening of Biological Products section ..	15.00	6.00	..
8	Foot & Mouth Disease Control ..	5.00	..	..
9	Ranikhet Disease Eradication ..	3.00	..	..
10	Disease Surveillance Unit ..	2.00	..	..
11	Control of TB & Brucellosis ..	2.00	..	..
12	Livefluke control scheme ..	7.00	..	..
13	Eradication of Rinderpest ..	8.00	..	..
TOTAL IV		109.00	24.00	..

No.	Head/Sub-heads/Scheme	5th Plan approved outlay		
		Total Capital Foreign exchange		
1	2	3	4	5
V—Figgery Development :				
1.	Upgrading of Pigs ..	5.00	1.00	..
2.	Organization of Pigrery Development Blocks ..	5.00	1.50	..
	TOTAL V	10.00	2.50	..
VI—Other Schemes :				
1.	Modernization of Slaughter Houses ..	6.00	4.00	..
2.	Strengthening of administration machiner ..	3.00	2.00	..
3.	Strengthening of Carcase utilization ..	4.00	2.00	..
4.	Strengthening of Statistical Organisation ..	2.00	..	..
5.	Improvement of Cattle Project ..	1.00	..	..
6.	Establishment of Mule breeding Centre ..	5.00	2.00	..
7.	Information Section ..	3.00	1.00	..
8.	Loans for BVSc. and Post Graduate Students ..	8.00	..	..
9.	Livestock Shows ..	2.00	..	..
10.	Self Employment for Development of Poultry Caltte and Dairying in J & K ..	12.00	..	..
	TOTAL VI Other Schemes ..	46.00	11.00	..
	TOTAL I, II, III, IV, V, and VI Animal Husbandry Sector	455.00	106.00	10.00

SHEEP HUSBANDRY
Schemewise outlay for 5th Plan
Rs. in lakhs

Sheep Husbandry :

1.	Establishment of intensive Sheep Development Blocks ..	70.000	..	..
2.	Strengthening of Existing Mutton Farms ..	10.000	..	..
3.	Establishment of New Mutton Farm ..	15.000	..	..
4.	Strengthening of Existing Sheep Breeding Farms ..	51.000	..	..
5.	Introduction of Sheep inixed Farming Economy ..	7.000	..	..

1	2	3	4	5
6.	Establishment of 125 Sheep and Wool Extension Centres ..	70.000	..	..
7.	Sheep Shearing, Wool Grading and Marketing ..	27.000	..	..
8.	Establishment of District Farm ..	40.000	..	..
9.	Purchase of Exotic Sheep ..	80.000	..	..
10.	Improvement of Grass lands ..	15.000	..	..
11.	Disease Investigation ..	15.000	..	..
12.	Statistical Cell ..	2.000	..	..
13.	Publicity Wing ..	2.000	..	..
14.	Assistance to Sheep Breeders Cooperative Societies ..	2.000	..	..
15.	Organisation of Intensive Muttonous Zone ..	5.000	..	..
16.	Community Wool Scorning ..	4.000	..	..
17.	Establishment Fleece Testing Laboratories ..	8.000	..	..
18.	Development of Sheep in Backward Areas ..	5.000	..	..
19.	Establishment Quarantine Station ..	3.000	..	..
20.	Distribution of Improved Ram ..	10.000	..	..
21.	Establishment of Transis camps for Migratory Breeders ..	6.000	..	..
22.	Strengthening of Administrative Machinery ..	6.000	..	..
23.	Sheep Shows, Conferences and Seminars ..	2.500	..	..
24.	Estab. of Dairy Goat Farms ..	10.000	..	..
25.	Indication of Sheep Tracts ..	1.000	..	..
26.	Angora Rabbit Farm ..	5.000	..	..
27.	Mass Drenching and Dipping ..	20.000	..	..
28.	Artificial Insemination centres ..	20.500	..	..
29.	Farmers' Training ..	1.000	..	..
30.	Training of Departmental Personnel ..	5.000	..	..
	TOTAL ..	503.000	..	..

SCHEME-WISE OUTLAY FOR DAIRYING AND MILK SUPPLY DURING 5th PLAN

Dairying

1.	Consolidation of Jammu and Srinagar Milk Supply Schemes including Rural Dairy Extension. ..	40.00	8.00	4.00
2.	Assistance to dairy Cooperatives ..	5.00	..	..
3.	Removal of urban cattle ..	5.00	1.00	..
4.	Establishment of 2 creameries ..	10.00	2.00	..
	TOTAL ..	60.00	11.00	4.00

8. Forests

Forests have a special significance in the economy of the State. It is a major revenue earning sector besides providing employment potential and raw material for forest based industries. The percentage of forest area to the geographical area in Kashmir province excluding Ladakh district is 58.4 and that in Jammu 45.9. Including Ladakh the total area under forest in the State forms 15.1 to its total geographical area. A number of schemes were included in the 4th Plan for effecting improvements, in various forms, both in the development and management of forest industry. For increasing the extraction of timber to the standard permissible limits, and to eliminate the middlemen it has been desired to nationalize the forest working by 1978 in Kashmir and 1981 in Jammu. To enable this policy being implemented, the Government lumbering undertakings has been strengthened to cope up with the work. Management studies have been done to improve and streamline its working on scientific, modern and commercial lines. The Undertaking is proposed to be converted into a Corporation.

2. A timber boom has been constructed on River Chinab at Akhnoor at an estimated cost of Rs. 1.00 crore which will greatly help in catching timber and preventing its flowing downstream.

3. Progress of various programmes against the physical targets expected end-

ing 4th Plan are indicated below :—

Forests	IVth Plan target	Anticipated achievements
1. Fuel Wood Plantation	3,441 (Hect)	7,944 (Hect)
2. Economic Plantation	3,023 (Hect)	6,300 (Hect)
3. Forest Consoliation & Demonstration	13,500 Sq. miles & 80,000 boundary pillars)	Pillars renovated.
4. Working Plans	2,900 (Sq. miles)	1,526 (estimated)
5. Rehabilitation of the degraded forests	2,424 (Hect)	1,519 (Hect)
6. Buildings	..	106 New Building and upgrading of Forest Rest Houses.
7. Roads	2,500 (Km)	i) 1,600 (Km) ii) Improvement Inspection paths 200 miles.
8. Forest area	20856 (Sq. KM)	20856 (Sq. K. M.)

There has been shortfall in achievement of targets under some schemes. Effective measures will be taken to remove the bottle-necks in the implementation of the important programmes so that the tempo is accelerated and the targets set are materialised.

5th Plan

The objectives of the forestry development in the Fifth Plan would be maximisation of the benefits from the forests not only in term of the increased productivity to meet the demands of forest based industries making the State self-sufficient

in items that are based on forest products but also in terms of protection and improvement of environment and providing increased employment to the increasing population. Whereas targets set forth for the increased productivity from the forests are to be achieved, great emphasis is to be laid on the improvement of environment and, therefore, this object would receive high priority. Forest as a whole occupy the hinter lands and inaccessible areas and, therefore, provide employment to population which is backward and which have no other avenues of employment at its disposal. Forest operations as a whole are also labour oriented and, therefore, increased operations in this sector will provide employment in the neglected areas.

Forests besides being the most important natural and renewable resources are recognised as powerful economical unit which effect the environment. With the population ever on the increase, both human and bovine, Forest protection has suffered over the years a lot which in turn also result in the incorrect land use at many places. All this has disturbed the balance of nature and soil erosion has continued to be a serious problem over the areas which are abutting thickly pockets of population (example Chararisharif and other Kareva areas near Handwara Bara-mulla in Kashmir and in Kandi areas of Jammu). It is the soil erosion that causes siltation in reservirs and rivers and thereby increase the flood hazard. That the bed of Jehlum and of Wullar and other lakes in the Valley has risen, is too evident a fact to need any emphasis. As such, in the relation of forests with people use of forests has to be made for conservation of environment, human recreation, nature and wild life conservation and management. Therefore, schemes as recreational forestry, rehabilitation of degraded fores-

ts, forest protection, river training, cultural operations and the schemes that fall under the broad category of soil conservation have been formulated. It would be necessary to carry the people alongwith Governmental activities in the forestry sector and create greater awareness of the role of the forest and forestry in the protection and preservation of the environment. This has been, by and large, neglected hitherto with the result that destruction of habitant has taken place all over the State and therefore, schemes like forest publicity, recreational forestry and the like have been envisaged.

The objective of increasing the productivity from the forests would not only mean the extraction of more industrialized wood from the forests but also the increased production of minor forest products, fodder etc. The forests cover an area of 2.021 million hectares in the State. Out of it about 8,47,000 hectares are covered by commercial forests, the rest being at present uncommercial forests. The growing stock existing on the commercial forests has been estimated to be of the order of about 92 million cubic meters. This gives an average stocking, per hectare, to be 185 cubic meters (against 90 for Asia Pascific region and 118 for the coniferous in the country). The annual yield has been worked out to be of the order of about 900 thousand M^3 . But as the regeneration of the fir forests which cover nearly 50% of the total area is not satisfactory, due to the various reasons, the actual production from the forest is necessary below than the notional one and that has been set in the working plan. The base level for the industrial wood from the forests of the State in 1973-74 having been taken as 400 M^3 , the target for the production is being set at 600 M^3 at the end of the Fifth Plan, showing a growth rate of over 11%. To

bring about this will need bringing in re-generation, natural and artificial in our fir forests. The demand for industrial wood is increasing and such market will be available for increased volume of the timber extracted. In fact the demand over the years will rise more than the increased production. This increased production can be achieved by not only reducing the waste in conversion and utilisation of the wood from the hitherto worked out forest but by opening up the country side and kaing accessible what were hitherto inaccessible forest. The schemes such as communications and buildings, mechanical logging and forest research are, therefore, to be taken up with the main object of increasing the productivity from the forest from the base level of 400M³ to 600M³ in the course of five years. In order to reduce the pressure of grazing on the forests, it is necessary to ensure better production of fodder from the forests and hitherto neglected pastures. Accordingly, therefore, scheme of fodder development and pasture management will be taken up. Fodder development scheme will also itself ensure increased productivity of a commodity so badly in need. The State also abounds in some minor forest products and their development is also a step in the direction of increasing their productivity from the forests. The production of resin from our Chir forests has shown a marked increase with the investment that has been made in the 4th Plan. Investment in the 5th Plan in this direction, will yield good dividends. With better methods of resin tapping the yield can be increased by 10%.

An outlay of Rs. 450.00 lakhs has been included in the 5th Plan. The names of the schemes and the outlay proposed for each

are indicated below :—

			(Rs. in lakhs)	
			Total	Capital
Fuel wood plantation-cum-Farm Forestry ..			35.00	1.50
Economic Plantation			50.00	..
Forest demarcation and Consolidation ..			48.00	..
Working Plants			10.00	..
Rehabilitation of degraded Forests ..			35.00	..
Development of minor forest products ..			9.00	.35
Trainings			10.00	..
Forest Research			16.00	..
Timber Utilisation Boom			25.00	..
Forest Publicity			6.00	..
Forest Protection			25.00	5.50
Statistics and Plan Coordination ..			8.00	..
Forest Corporation			50.00	50.00
Buildings			25.00	25.00
Control and Supervision			30.00	30.00
Preservation of Wild Life			12.00	..
Recreational Forestry			18.00	..
River Training Works			15.00	15.00
Forest Labour Cooperatives			8.00	..
Cultural Operations			15.00	..
			450.00	113.35

*Schemes to be executed by the Fisheries and Games Department.

Targets set in respect of various schemes are indicated below :—

Schemes	Unit	Physical target
Fuel wood Plantation Cum		
Farm Forestry ..	Hectares	10,644
Economic Plantation ..	-do-	10,025
Forest ..	K. M.	40,000
Demarcation ..	Boundary Pillars	1,00,00
	Pack -do- -do-	50,000
	K. M.	10,000
Working Plan ..		
Rehabilitation of degraded forests ..	Hectares	30,000
Development of minor forest products ..	Hectares	500
	Production in Quintals	10,000
	K. Ms.	2,190
Roads ..		
Timber Extraction ..	Cubic Meters	6,00,000

Fuel-Wood Plantation-cum-Farm Forestry

At present the forests provide 10 lakh Mds. of fuel-wood which does not meet the demand for it which is on the increase consequent upon the cold climate and oil shortage. To meet the increasing demand of fuel-wood in the urban as well as rural areas, fuel-wood plantations; willow in Kashmir, Robinia in Banihal and Doda area and Shisham in Jammu will be raised.

The marginal lands and the barren proprietary lands, village common lands, Government waste lands, road sides and canal sides will also be planted with suitable species so as to yield small timber, firewood and fodder.

An areas of about 10,644 hectares will be brought under plantations. Since large compact blocks would be economically more viable than the scattered plantations, effort would be made to identify such areas and raise plantations on them.

2. Economic Plantation

Wood is finding new and diverse uses in industry to cater to the needs of various small scale and large scale industries, plantations will be raised. In Kashmir Valley, poplars, willow, walnut, mulberry, Ash and in Jammu region Shisham, Khair, Simbal, Eucalyptus and Bamboo will be raised on 10,025 hectares.

Of late, there has been considerable demand for mulberry timber for sports goods. Mulberry tree is protected in the State and its felling is prohibited. Mulberry trees cannot only sustain this industry but silkworm rearing also depend upon it. As such planting of mulberry will be encouraged to meet the increased demand.

3. Forest Consolidation and Demarcation

The work of demarcation of the forests will be completed during the 5th plan. 'Chaks' inside the forests are a potential nucleus for sustained damage to the surrounding forest crop and encroachments on forest land. Some of the 'Chaks' within the forests are proposed to be acquired and planted with suitable species.

During the fifth Plan it is proposed to undertake work of demarcation on 40,000 Kms. of boundary lines and fixing 1,00,000 boundary pillars including 50,000 pucca pillars.

4. Working Plans

The work of preparing industrially oriented working plans covering entire catchment area was started during the fourth year of the IV Plan in Chenab Valley. This work will be extended to other catchments. In the light of the intensification of management, old working plans will have to be revised to bring them in tune with the modern concept of dynamic forestry. About 10,000 Sq.Kms. area will be surveyed and inventories regarding growing stock and availability of raw material for various industries will be prepared during the 5th Plan. This is considered necessary for increasing timber extraction.

5. Rehabilitation of Degraded Forests

Due to heavy pressure of demand on forests near the habitation area, the forests have degraded considerably. All such forests will need to be closed for rehabilitation.

About 30,000 hectares of degraded forests will be tackled under this scheme.

6. Preservation of Wild Life

Kashmir can boast of having a rich and varied fauna but due to unscrupulous poaching and pressure of grazing etc. the habitat conditions have changed and the rich heritage is getting almost extinct. Improvement of wild life habitat on scientific lines will be given top priority so that the conditions conducive for growth of wild life are provided to the wild animals. This will also include plantings for feed and fodder, bunding of lake reservoirs and improvement of game reserves.

Kashmir stag is facing extinction in spite of complete protection to this species. A census of this species will be undertaken both in Kashmir and Chenab valley in Jammu.

Survey of potential wild life areas in Chenab Valley and Kashmir Valley will be undertaken and the present status of wild life will be assessed. This information will be decisive factor in the selection of new sanctuaries and game reserves. All the existing game sanctuaries and game reserves will be upgraded. For tourists, shooting and lodging facilities will be improved. Dachhigam sanctuary which is very frequently being visited by foreign and inland tourists will be remodelled.

It is contemplated to set up a Himalayan Zoological park in Srinagar near Chashma-shahi with a view to preserve vanishing Himalayan fauna and to educate the younger generation by creating an awareness about the protection of wild life and acquainting them with our rich heritages of wild life.

The work of preservation and development of the habitat in selected game areas will be done by the Fisheries and Games Department while in other areas and

forests, it will be done by the Forest Department.

7. Development of Minor Forest Products

Due to increasing indigenous requirements and export potential, minor forest products of the State are gaining considerable importance. Areas under Kuth, Belladonna, Artimesia, Dhoop etc. will be extended artificially and the areas where these occur, will be managed scientifically and in addition method of collection, drying etc. will be improved.

As far as cultivation of pyrethrum is concerned, the cultivation is very uneconomic. To bring the production of pyrethrum within the reasonable economic limits, net area under it will be reduced and extensive cultivation will be replaced by intensive so that the production, per acre unit, is maximised and costs are brought down.

Cultivation of Hops which is an active ingredient in the manufacture of beer will be started on an experimental basis.

As far as resin extraction is concerned, new method of "Acid Treatment" will be introduced on a wider scale to increase production. Additional areas in Rajouri will be tapped for the first time.

About 500 hectares will be brought under cultivation and 10,000 quintals of resin will be collected.

8. Training of Staff

Two departmental schools are running one at Chitternagar (Kashmir) and the other at Miransahib (Jammu). The schools impart training to foresters, forest-guards and sub-assistants from Agriculture Department. Training will be given in new techniques of management, use of new

tools and instruments and in modernising forestry operations. This will go a long way in the way of improving the efficiency at all levels.

9. Forest Research

With the facilities of Research Station at Chatternar and Tangmarg and a fully equipped Research Laboratory at Srinagar, it is proposed to undertake extensive field trials and laboratory research on the following subjects:—

- (a) Regeneration of Fir ;
- (b) Improvement of Seed Quality through Seed production areas ;
- (c) Trial of exotics ;
- (d) Vegetable ;
- (e) Vegetative propagation of conifers ; and
- (f) Plant and animal ecological studies.

10. Forest Publicity

The scope of forest publicity will be widened and a full fledged Public Relations Unit established. Due to ignorance and other undecipherable reasons there is a general apathy among the farmers towards protection of forests. Public relations at higher and lower echelons of society is necessary in order to have an effective liaison with the people. Establishment of new industries in the near future will all the more necessitate creation of such a unit.

11. Forest Protection

For affording complete protection to the forests against indiscriminate felling, encroachments, fires and over-grazing, additional supervisory staff will be engaged. Besides this, jeeps will be provided to forest officers for increasing the mobility

to check forest crimes. In addition, check posts, huts and cattle ponds will be constructed and fire lines will be cleared.

12. Forest Corporation

The Government Lumbering Undertaking set up some years back has been operating and has reached the level of extraction of 42 lakh cft. of timber. For achieving the objective of nationalisation of the forest working, the Undertaking has to play an important role and, in effect, this organisation will be a mechanism used for exploitation of the forest wealth to the silviculturally permissible level for which target set by the end of 5th Plan, is 6.00 lakhs cubic meters against the 4.00 lakhs cubic meters to be reached at the end of the 4th Plan. The Undertaking will be converted into a Corporation to streamline its functioning, modernize management of working and improve productivity. With the formation of the Corporation the level of timber extraction will increase during the years to come. An outlay of Rs. 50.00 lakhs has been included in the 5th Plan for share capital contribution to be made by the Government to the Corporation. It will meet the balance requirement of its capital by raising resources from the commercial banks.

13. Buildings

Due to the expansion in the forestry, requirement of office and residential accommodation has increased many fold. Moreover, many old Rest Houses and Inspection Huts need to be renovated and upgraded. Old buildings and rest houses constructed and upgraded during IV Plan are to be fitted with electric and water connection and are to be furnished. All these works will be executed during the V Plan.

14 Roads and Communications

At present approximately 50% of the prescribed yield from our forests is not being realised because of inaccessibility

certain forests. Opening of such remotely situated and locked up forests is possible only through better communications.

Proper road planning in the forests is essential for commercial exploitation of the available forest resources. Apart from transport of timber, forest roads, enable quick forest inspections, transport of material and personnel, fire protection, regeneration work, general opening up of the areas and communication facilities for the local population. As it is not possible to construct roads for direct loading of timber into vehicles the roads are essentially to be used in conjunction with modern logging equipment.

Survey of the following roads which are of high priority has been completed:-

		(Rs. in lakhs)	
Name of the Road	Appx. Length	Appx. cost	
1. Chhatru Singhpor Road ..	13 KM	39.00	
2. Bandarkote-Sirshu (Dachan) ..	44 KM	113.31	
3. Chilli Link Road in (Balish) This road is being taken up during 1972-73 & 1973-74 under Drought Prone Area Prog:)	6 KM	16.60	
4. Sansar Furinkund Lander Rd. ..	47 KM	67.70	
5. Pogul link road from Markar kote ..	20 KM	50.50	
6. Mohu Mangat Link Road from Nachilian	32 KM	59.00	
7. Thaiyan-Hitsil Road in Kamraj ..	32 KM	27.78	
8. Metalled Road from Surrigam to Fotsai (Lolab Vally) ..	3 KM	7.69	
9. Khumrial-Shumrial (Lolab) ..	3 KM	7.63	
10. Sarvwar Seven ..	17 KM	9.58	
11. Thayam-Mohri ..	12 KM	9.58	
12. Doda Thana ..	50 KM	77.40	
13. Chintajai (Bhaderwah) ..	19 KM	14.63	

In addition to the above roads, survey of the following roads is in hand :—

a) Extension of Ponar Road;

- b) Athwatoo-Labakachal Road ;
- c) Road Dorus-Takipora
- d) Road to connect Afan, base of com-
ptt. 63a/SL with compt. 75, 68/SL
- e) Link road from Kahara in Doda to
Thattri Road.

Construction of the roads will be taken up under a phased programme. During the 5th Plan it is proposed to construct/upgrade 2,190 Kms. of forest roads and Inspection paths.

15. Recreational Forestry

Rapid industrialization and urbanisation is causing an increase in the number of visitors visiting forest areas for relaxation and recreation, Fio-sesthetic value of areas near main towns can be enhanced by developing Hariparbat, Manasbal lake, Ramnagar Rakh and Mansar. These areas will enhance the tourist potential and create an awareness among the masses about recreational utility of the forests.

16. River Training Works

Some nallahs are striven with heavy boulders in their course restricting the smooth floatation of timber in them. To train the flow of water and to permit uninterrupted "mehans" boulders and rocks in main streams will be blasted.

17. Forest Labour Co-operatives

In an endeavour to have forest labourers participation in the management of our forests and as a means of nationalising forest industry, part of forest working will be entrusted to the co-operatives. As such co-operative societies will be formed by forest labourers. Financial assistance for managerial cost, share capital and loan will be provided to these societies.

18. Cultural operations

Forests are to be kept in a healthy condition. Cultural operations when done in

a forest improve its quality. Cleanings and early thinnings, removal of inferior species and climber cuttings could not be undertaken in certain forests. This has resulted in suppression and stagnation. Implementation of this scheme will improve

our forests qualitatively and will provide labour to the people living near the forests. The refuse material will be used as fuel-wood by the people living nearby the forests.

9. Soil Conservation

In a hilly state soil conservation assumes an important role both for development of forests and agriculture apart from providing fodder. Soil conservation is also related to control of floods. A number of schemes were included in the IVth Plan for soil conservation. In addition a scheme regarding Pohru catchment was taken up under the Centrally Sponsored Programme. This scheme is related to the control of floods in the Valley of Kashmir by checking erosion of soil and coming down of debris, silt and other sediment into the Jehlum river downstream of Wullar. Under the scheme soil and water Conservation on water shed basins and fencing is expected to be completed over an area of 42 lakh Rft, sowing and planting on 5,886 hectares. Schemes have been prepared for an area of 2847.55 square miles and survey completed on 1310 square miles by the end of 1971-72 under the scheme Soil and Land Use Surveys. By the end of the 4th Plan, an additional area of 800 Sq. miles will be covered. 260 hectares of table and ravine lands have been stabilized upto 1971-72 and an equal area will be covered additionally. On the National Highway (Jammu - Srinagar Road), fencing has been done on an area of 1.05 lakh Rft. Sowing and planting on 160 hectares and minor engineering works on 2.35 lakh cft., by the end of 1971-72. Addl. 45.0 thousand rft. will get fenced by the end of the 4th Plan besides sowing and planting on 140 hectares and minor engineering work on 2.65 lakh cft. Scheme regarding development of grass lands has been taken up. Between the years 1969-1973 chemical fertilizers were aerially spread on the high level pastures

and an area of 35,317 acres covered under the scheme.

5th Plan

An outlay of Rs. 175.00 lakhs has been included in the 5th Plan for implementation of soil conservation programme. The scheme-wise distribution of the outlay is indicated below :—

A—SOIL CONSERVATION ON FOREST LANDS

(Rs. in lakhs)

1. Soil and water conservation on water shed basis	56.00
2. Soil and land-use survey	12.00
3. Demonstration, Research and Training	4.00
4. Stabilization of ravines and protection of table lands	2.00
5. Control of erosion on National Highway	8.00
6. Pasture and Fodder Development	18.00
Total-A :	100.00

B—SOIL CONSERVATION ON AGRICULTURE LANDS

i) Agriculture lands	43.00
ii) Soil Surveys	10.00
iii) Grass land fodder development	22.00
Total-B :	75.00

Grand total : 175.00

Physical targets set under various schemes are indicated below :—

Schemes	Unit	Physical targets
1. Soil and Water Conservation	lakh RFT Lakh CFT Hectares	22 82.05 3300
2. Soil land use survey	lakh Hectares	3.8
3. Stabilization of ravines and table lands protection	Thousand Hct.	6
4. Control of erosion on National Highway	Lakh RFT Lakh CFT Hectares	3 1125 450

SOIL AND WATER CONSERVATION ON WATER SHD BASIS

All the priority areas in the catchments will be tackled under an integrated and co-ordinated schemes. This will ensure most effective results and provide a firm base of soil conservation and land development and ultimately lead to better utilisation of land resources.

During the 5th Plan 6,000 hectares will be treated under this scheme. This will also include fencing to the extent of 40 lac. rft. and minor engineering works to the extent of 150 lac cft.

(ii) Soil and Land use survey

The following works will be undertaken under the scheme :—

1. Survey, Planning and preparation of schemes of :—

a) Sindh)	
b) Vishow)	
c) Baramulla gap)	
d) Lower Chenab	)	2048.55 Sq. miles
e) Upper Chenab)	
f) Poonch)	
g) Rajouri)	

2. Revision of schemes 1000 Sq. miles

(iii) Demonstration, Research and Training :

The soil conservation School, Miran-Sahib which is a centre of training for the forest personnel in soil conservation will be upgraded and equipped fully.

8 pilot demonstration projects will be launched each covering about 200 acres, 4 will be in Kashmir Valley, 2 in Sivalik zone of Jammu Province, and an equal number in Chenab Valley. Training facilities for the trainees will also be improved.

(iv) Stabilization of Ravines and Protection of Table-lands :

At present about 10,000 hectares are effected by ravines. About 1,000 hectares will be stabilized.

(v) Control of Erosion on National Highway :

This is an important scheme having a bearing on the protection of the national highway. Afforestation and other anti-erosion measures will be undertaken to stabilize the slips causing block-ade on the National Highway. The following works will be undertaken for this purpose :—

(a) Fencing	4 lac rft.
(b) Afforestation	600 Hect.
(c) Minor Engineering Works	15 lac cft.

Pasture and Fodder Development

The live-stock population of the State thrive mainly by grazing in high level Alpine pastures and other grazing areas lower down. Pastures are thus in great demand by the farmers and graziers but due to constant increase in the number of live-stock the carrying capacity of our pastures is diminishing day by day.

With the object of improving the feed and fodder resources of the State qualitatively as well as, quantitatively, the Grass land fodder development scheme was initiated in the year 1969-70.

The main objects of the scheme are :—

- i) To study existing fodder grasses in pastures, their collection, identification and analysis for fixing their nutritive value ;
- ii) To carry soil studies with a view to determining the dose and type of fertilizers that will be required in a particular locality ;
- iii) To eradicate harmful grasses and weeds ;
- iv) To determine carrying capacity of each pasture and optimum stock permissible, per standard unit ;
- v) To introduce high yielding and more nutritive grasses ;
- vi) To study effects of rotational grazing and allied matters pertaining to pasture improvement ;
- vii) To carry proper surveys, collect requisite data and mapping etc. of pastures.

All the pasture lands will be brought under the scientific management during the 5th Plan and their status will be im-

proved thereby increasing the feed and fodder resources for the cattle. Rational closure will be resorted to. Special feature of this scheme is aerial fertilisation of high level pastures. An area of 50,000 hectares will be covered.

Soil Conservation on Agricultural lands

In order to minimize the time lag in the utilisation of the potential created by the medium and major irrigation works in the State, soil conservation on the agricultural lands is an essential and urgent need. Two Soil Conservation Divisions have been set up, one each in Jammu and Kashmir Divisions under the Agriculture Department, and staff trained to meet the job requirements. Work is in progress in the command area of the Tawi Lift Irrigation Project. The lands coming under the command of other medium irrigation works, and agricultural lands in Pohru catchment, as also the areas which come under the scope of Tubewells in Jammu have to be taken up under this scheme. The operations will extend to the command of the medium irrigation works in Kashmir also which are already under execution. The programme also includes soil surveys in various backward areas and extension work of grass-land and fodder development.

10. Command Area Development

It has been the experience all over the country that there is usually a time lag between the creation of Irrigation potential and its full utilisation by the farmers. The lag generally occurs due to delay in the construction of field channels, levelling and terracing of land and other soil conservation measures. Provision of water in areas dependant on rain, makes it necessary to educate the farmers in the use of improved technology, introduction of high yielding varieties and a crop, rotation which ensures maximum returns to the farmer. This involves a lot of extension work by the Agriculture, Horticulture and D. Departments. It also requires arrangements for supply of agricultural

inputs, marketing of products etc. to be tied up.

A command area authority has been set up to co-ordinate work connected with the levelling of land, construction of field channels, supply of inputs etc. for the potential created by the Tawi Lift Irrigation Scheme which will provide irrigation to 33,000 acres. During the Fifth Plan some more major and medium irrigation projects will create potential for irrigation and for its utilisation steps would have to be taken in advance. An amount of Rs. 50.00 lakhs has been provided in the Fifth Plan for this purpose. An equal amount will be provided as Central Assistance. ...

II. Fisheries

There is a substantial potential for development of fisheries in the State especially in the Valley which abounds in water sources and lakes. In fact the wuller lake is the largest fish water Lake in the whole of Asia and this alone provides great scope for development of food fish. From Years past fish has constituted an important item of the diet of the people in the valley and other parts of the State. In view of increasing shortage of mutton, fish provides a cheaper protein food.

The development of fisheries has been somewhat static during the last few years. Solutions to the various problems of research are still being worked out. The problems of disease and mortality in trout are serious matters to be dealt with. As regards the development of food fish except for introduction of carp varieties many years back no substantial progress could be made. Some of the problems are being handled by the I. C. A. R. and it is hoped that during the Fifth Plan a break-through in research on both sport and food fish would be achieved. Consequently against an outlay Rs. 25 lakhs the expenditure on fisheries development by the end of the 4th plan is likely to be Rs. 3.81 lacs.

4. The targets set for the IV plan and the anticipated achievements for this plan, are indicated below:-

Item	Unit	Base level 1968-69	IV Plan target	IV Plan achievements		
				1969-72	72-73	73-74
Fish seed produced (Spwan)	lakh Nos.	8.83	45.92	22.36	11.56	12.00
Fish Seed Farms	Nos.	2	5	—	—	1
Fish Production (Inland)	000 Tonnes	3.25	31.20	18.38	6.30	6.50

5. An outlay of Rs. 40.00 lakhs has been included in the plan as under:-

(Rs in lakhs)			
	Total	Capital	Foreign exchange
1. Food Fisheries ..	15.00	6.00	..
2. Sport Fisheries ..	9.00	6.76	0.38
3. Development of River and Lake Fisheries ..	4.00	..	..
4. Training & Investigation ..	9.00	..	..
5. Administration and Extension	3.00	..	..
TOTAL :	40.00	12.76	0.38

Food Fisheries

6. This scheme includes fish farming and applied nutrition programme. It is proposed to set up 3 farms. An outlay of Rs. 6.26 lakhs has besides been included under the scheme as a token provision for commercialisation of the trout culture in the State as waters at various places have abundant potential for its development.

Sport Fisheries

7. There is an acute dearth of fishing-cum hunting lodges especially in the Chenab Valley where the anglers face difficulty during peak tourist season for want of accommodation on the streams. Four lodges are proposed to be built. Fifteen of the existing lodges at various places are to be upgraded. Twenty shelter sheds at various streams are also proposed to be constructed. The existing farms are to be upgraded and improvement works need to be carried out on various streams. Fishing tackle is proposed to be imported for use of the anglers and

the visitors. The scope of the scheme will be extended to more areas. New fishing beets will be set up for natural propagation of trout.

Development of River and Lake fisheries.

8. Under the scheme it is proposed to set up a model village for groups of fishermen in Wullar area which is expected to help popularize the modern methods of exploitation of fish and also persuade the fishermen to abide by rules and regulation governing scientific management of fisheries in the various basins. This will help increasing fish catch.

Training and Investigation

9. Accommodation for the staff and the students receiving Training at Acchabal Game and Fisheries Training School is presently inadequate. It is proposed to construct a new building for housing the School and two staff quarters. Investigation and biological survey will also be taken up.

Strengthening of Administration and Extention

10. It is proposed to construct, renovate and upgrade 10 miles of road length and strengthen culverts over trout streams in Kashmir. In Jammu division, very little attention has so far been paid to the strengthening of protection staff on streams and rivers. Accommodation is required to be provided for guards in the far-flung areas.

11. For scrutinizing the estimates of works and maintain proper check over

the bills and also prepare designs and drawings of various engineering works, a small cell consisting of a draftsman with supporting staff is proposed to be set up.

Physical Targets for 5th plan

12. The main physical targets set and indicated below :—

Item	Unit	Base level 1973-74	Target 5th Plan
1. Cold Storages	No	..	1
2. Refrigerator	No	..	..
3. Van	No	..	1
4. Refrigerator boats	No	..	5
5. Fish Seed Farms	No	8	18
6. Fish Production (000 tonnes)		6.50	8.00
7. Const. of lodges	No		4
8. Shelter sheds	No		20
9. Upgrading of existing lodges	No		15
10. School Building	No		1
11. Staff quarters	No		2
12. Renovation and upgrading of roads	miles		10

The Jammu and Kashmir Agrarian Reforms Act 1972 has become operative from the first of May, 1973. Under the Act, Absentee-Landlordism has completely ended and a ceiling has been imposed on ownership of self-cultivated land. On the effective date, all lands under the cultivating possession of the owners in excess of the prescribed ceiling stand vested in the State. The non-owner cultivators will acquire the propriety rights of the land in accordance with the law on payment of compensation which has been prescribed at twenty times the rent payable to the owner on the basis of chakla rate. The payment is spread over a period of twenty years.

As an important instrument of development, land reforms will yield full benefits after consolidation of holdings is finalised. This can, however, be taken up only after the distribution of surplus land is completed and the holdings of prospective owners determined. Nevertheless, the incentive of ownership of land provided to the cultivator is expected to intensify agricultural production.

As a first step in this direction, verifica-

tion of cultivating possession of individual tillers (owner and non-owner) has been taken in hand. Since enormous amount of physical labour is involved in the process of field to field verification, the State has been divided into 309 manageable revenue circles, each circle comprising five to ten patwar halqas depending upon the size of the each halqa. The revenue circle is under the charge of a Revenue Officer, not below the rank of a Naib-Tehsildar. Each circle will have one Girdawar and additional Patwaries needed for an area. This staff is being trained.

Consolidation proceedings, which will be taken up in the later years, will obviously need a revision of the village maps. To ensure that all avoidable errors in the revised cadastral survey are eliminated the Survey of India has been requested to lay down base lines on the ground. It is estimated that an amount of Rs. 0.50 lakhs would have to be paid to the Survey of India for this purpose.

The cost of the Organisation for the Fifth Five Year Plan period is estimated at Rs. 260.00 lakhs.

12. Land Reforms

PROGRESS OF CONSOLIDATION OF HOLDINGS

(J&K Consolidation
of Holdings
Act was enacted in
1962)

Year	Total geographical area	Net area sown	Area fit for Consolidation	Area consoli- dated during the year	Total to the end of the year
1	2	3	4	5	6
1968-69	59,74,576	17,69,815	N. A. (as the whole State has not been surveyed)	7,495	47,102
1969-70	-do-	..	..	13,560	60,662
1970-71	-do-	..	..	20,801	81,463
1971-72	-do-	..	..	17,373	98,836
1972-73	-do-	..	..	Nil	98,836
1973-74	Consolidation work has been suspen- ded till im- plementation of land reforms.				

LAND REFORMS

Preparation of Record of Rights

Year	No. of districts	Up-to-date record of rights available (No. of districts)	Up-to-date record of rights under preparation	Remarks
		prepared during the year	Total prepared so far	
1	2	3	4	5
1. 1969-70 (actual)		1307 villages		
2. 1970-71 (actual)		1180 -do-		
3. 1971-72 (actual)		947 -do-		
4. 1972-73 (likely)				
5. 1973-74 (anticipated)				

Note :— Record of Rights are prepared in every village at the time of the settlement and thereafter fresh editions of each Record of Rights is compiled after every four years. Thus in 25% villages fresh additions are proposed during a year, for another 25 percent during the next year, for further 25 percent during the third year and for the last 25 per cent during the fourth year and so on. But during 1972-73 such fresh additions (called jamabandis) were not prepared nor will any be prepared during the year 1973-74. Actually the Revenue agency will be busy with the implementation of land reforms and as a result of land being owned by the tiller himself, the format of rights will be prepared after the implementation of land reforms in the revised format.

13. Co-operation

The Jammu and Kashmir State has been identified as one of the Backward State so far as Cooperative movement is concerned. The weakness as at the primary level were mainly due to stagnation in the expansion of membership during the larger part of the 4th plan. This was due to accumulation of large overdues resulting in the suspension of the line of credit for short term loans from the Reserve Bank of India. The slow pace of enrolment of additional membership was also due to a linkage of credit with procurement of paddy. There were also organisational and financial weaknesses in the movement. The Government had, therefore, to step into provide credit to the Societies but this was not adequate to meet their full requirements. The credit was interest free and channelised through the Central Co-operative Banks. As the Banks and societies did not get any commission to handle the business the Central Banks did not have the required motivation to exercise adequate supervision over the credit advanced. The total volume of loaning was only Rs. 1.59 crores by the end of 1970-71. The expansion of the deposits with the Central Banks also remained stagnant. A few oil mills were set up by some societies. This, however, did not add to the resources of the Banks and Societies in a significant way. All these factors put together affected the financial viability of the Co operative Societies at various levels.

With a view to removing the difficulties and weaknesses in the movement a number of steps were taken to improve the position. Of the short term loans which were overdue were converted into 10 years' long Term Loans. Recovery of Short Term credit was delinked from procurement. This restored

the line of credit from the Reserve Bank of India with a credit limit of Rs 2.00 crores in the year 1971-72. The same amount was repeated for 1972-73. The position of recovery improved considerably with an overdue position of 16% at the end of June 1973.

The Central Co-operative Banks expanded medium term loaning with the availability of viable schemes under the S. F. D. A. and M. F. A. L. projects. The Central Banks applied for medium term limits for the first time from the Reserve Bank of India and an amount of Rs. 16.00 lakhs is expected to be advanced during 1973-74. Loaning policies and norms were laid down relating credit to the viability of schemes in the case of the Medium and Long Term loans. Short Term loans, for the first time, carried interest which accrued to the Co-operative Banks and primary Societies. The supervision of primary co-operative credit societies was transferred, by and large, to the Co-operative Banks. A beginning has been made in advancing production finance for growing fruits and vegetables. The IVth plan envisaged reorganisation of the primary societies into viable units. With the steady increase in business and conversion of loans reorganisation programme was not considered necessary especially in the plain areas where the Societies handled more business and started becoming viable. In the hilly areas the amalgamation programme became impracticable as increase in the area of operation would have been at the cost of accessibility. In these areas it is proposed to re-organise the Societies into a Block level service co-operatives operating with a number of depots affiliated units. Two Farmer Service Societies are expected

to be set up during 1973-74. These Block Level Societies will provide all possible business and service to the farmers such as Short, Medium and Long Term credit, marketing and processing facilities and consumer goods etc.

In order to remove the administrative weaknesses in the Co-operative movement it was decided to form common cadres of Accountants and a beginning was made in 1973-74. It is expected that 600 trained Accountants would be with the Societies by the end of the IV plan. Similarly a common cadre of management for the Co-operative banks is being formed and is likely to be in position by the end of 1973-74.

In order to eliminate the vested interest in the co-operative movement amendments to the Co-operative Laws were made during 1972 to limit the term of members of managing committees. Representation of backward classes was also provided for and restrictions were imposed as regards the number of societies in respect of which one person would be an office bearer.

Fifth Plan

The object of the Vth Plan is to develop the Co-operative movement to provide infra-structure for the development of rural areas. This will require the strengthening of the Co-operative movement both organisationally and financially so that the Societies become viable and that all the services required by the members are rendered by the Societies. It is also necessary to increase the coverage of membership so that all the rural families are represented in the Co-operative movement.

The Strengthening of the structure of primary societies will be achieved by increasing the business of these societies. Apart from expansion in the supply of Short term credit efforts will be made to expand Medium and Long Term credit especially in the schemes run by S. F. D. A. and M.F.A.L.

schemes for which refinance would be available from the Agricultural Refinance Co-operation. In order to enable the societies to handle a larger quantity of agricultural inputs the societies are proposed to be assisted by providing them share capital contribution so that they are able to borrow adequately from banks.

Improvements in the management of primary societies would be made by the expansion of the common cadre of Accountant-cum-Managers and strengthening supervision by the Central Banks over the Primary Societies. Increase in coverage during 5th Plan is expected to be 100% and every rural family is proposed to be brought within the co-operative fold. An expansion in the number of viable societies is therefore, proposed. The number of societies is expected to increase from the existing level of 1104 to 1404.

The existing procedures regarding sanctioning of loans, recovery, marketing, input of agricultural products will be further streamlined.

For achieving the objectives set in the 5th plan, an outlay of Rs. 40.00 lakhs has been included for the Agricultural credit and Rs. 307.00 lakhs for other co-operative schemes. The programme-wise financial outlay are indicated below.

S. No.	Programme	Rs. in lakhs
Other Cooperative Schemes		
1.	Co-operative Credit	181.90
2.	Co-op. Marketing	17.43
3.	Co-op. Processing other than Sugar Factories	17.00
4.	Co-operative Storage	45.25
5.	Consumer Cooperatives	11.00
6.	Co-operatives in Backward area	16.00
7.	Co-operative Training and Education	18.42
		Total :—307.00

Agricultural Credit

1. Flotation of debentures by the Land Development Banks.

At the end of 4th Five Year Plan period it is expected that an amount of Rs. 4.00 crores would be advanced on account of short term credit and Rs. 60.00 lakhs on account of Medium term credit through co-operative Banks. A part from Horticulture crop loan for cereal crops would be Rs. 3 per acre. The quantum of short term Horticulture credit is expected to be about Rs. 40.00 lakhs.

The required debenture support for the long term loaning of Rs. 4 crores under ordinary as well as special programmes of Agricultural Refinance Corporation at an average margin of 10% would be Rs. 40 lakhs.

Cooperative Credit

1. Loans to be raised by the State Govt. from Reserve Bank of India for share capital in cooperative institutions.

By the end of 5th Five Year Plan period it is expected that an amount of Rs. 12.00 crores would be advanced on account of short term credit of which 2.5 crores would be for Horticulture development. Of this about Rs. 3 crores is expected to be advanced by commercial banks. The volume of loaning would therefore be intensified to Rs. 100 per hectare. Medium term advances would go upto Rs. 90 from the present level of Rs. 60/- rural household. This would involve an additional credit of Rs. 3.5 crores. The total advance thus to be made through co-operative banks at the end of the 5th Five Year Plan period i. e. 1979-80 would be Rs. 12.0 crores. The level of deposits with Central Cooperative Banks is presently Rs. 2.70 crores which, it is expected would increase to Rs. 4.20 crores. Reckoning 50 % of the deposits of the central banks being involved in short and medium term credit

the borrowing from the Reserve Bank to meet the balance would be of the order of Rs. 10.83 crores. This will involve a share capital of Rs. 2.71 crores. The present share capital of Banks is Rs. 2.94 crores. Obviously additional share capital to the extent of Rs. 1.75 crores would have to be raised by the banks to meet the total credit requirements. An amount of Rs. 1.20 crores would be available as share capital contribution by societies to the banks on the basis of share linkage of borrowing of 1:10 and consequently Rs. 2.86 crores only would have to be raised by the banks from the Government from the long term operation fund. On the basis of the present primary-Central bank linkage and expected growth of shares from individual members an additional contribution of Rs. 33 lakhs would have to be made by the State Govt. to shares of primaries. The share contribution required to be made by the state Govt. from the long term operation Fund would be Rs. 1.19 crores.

2. Govt. Loans to individuals for purchase of shares in primaries.

Increase in the coverage to 100% of rural cultivating families would mean covering 3 lakh persons over a period of 5 Years. It is expected that of this member about one lakh would be marginal farmers and the rest small & large farmers. Whereas in the project areas all SFDA/MFAL marginal farmers can be assisted through the project funds for contribution to share capital, in the non-project districts of Srinagar, Doda and Udhampur no such scheme exists. It is, therefore proposed that in these areas 12500 marginal farmers would be assisted by grant of medium term loan 2 shares each per member. The outlay for the 5th plan for this scheme would therefore, be Rs. 250 lakhs.

3. Subsidy to control banks for the opening of branches in backward areas.

In order to sustain the volume of loaning both on account of medium and short term proposed at the end of the 5th plan

period the present net work of branches would have to be increased. There are 36 branches of the central Coop. Banks at the moment which would have to be increased to 70 branches assuming an average loaning of Rs. 20.00 lakhs per branch. This would mean the addition of 34 branches in addition to the existing branches. Half the number of these branches are expected to be opened in backward areas in order to facilitate loaning as well as to increase business. This would mean 17 branches in backward areas while no subsidy is proposed for branches in backward areas while no subsidy is proposed for branches in backward areas a subsidy at the rate of Rs. 25,000/- per branch may be given in the first year of the opening of each of the backward branches. This would involve a total cost of Rs. 8.50 lakhs subsidy being paid for three years on tapering basis at 1:2,3:1. However, the present number of branches at 20 would require to be expanded to 24. The four branches to be set up would be in hilly and backward areas. The average lending per branch at the end of 5th plan period would be Rs. 30.00 lakhs.

4. *Subsidy for supervisory staff.*

The transfer of supervision is proposed to be subsidized for two more years in the 5th plan by which time the banks would be able to sustain the cost of staff for supervision. An amount of Rs. 7 lakhs is proposed for this purpose.

5. *Cadre for Key Personnel for Co-operative banks.*

In order to strengthen the management of co-operative banks it is proposed to constitute a common cadre of managers. Common cadre would be necessary to attract good and qualified managers in the Co-operative fold by providing adequate career prospects as well as provide for better control of the management. The cadre would comprise General Managers Executive Officers. Deputy Manager Chief Accountants and Field Officers 50%

of the cost is proposed to be subsidized in the first year of induction of personnel, the subsidy tapering off in 3 years.

6. *Cadre of Accountants.*

The appointment of 200 Accountants made in 1973-74 would require to be subsidized during the 1st two years of the 5th Plan period at the rate of Rs. 200 per accountant per month and at a rate of subsidy of 60% in the 1st year of the plan and 33% in the 2nd year of the plan. In addition it is proposed that another 800 accountants would be added to the cadres which would require a subsidy in the same manner. The total subsidy for the cadres would come to Rs. 36.00 lakhs.

7. *Opening of new branches by the Land development bank*

During the 4th Plan period the Land development bank is expected to achieve a rate of loaning of Rs. 32/- per hectare. The main schemes comprising horticulture Development under two special A. B. C. programmes. Loans for Tractors and Minor Irrigation. During the 5th Plan period it is proposed to expand the activities of the Land Development Bank to cover the Long Term Loans for Sheep breeding and Dairy units and to bring tractors and power Tiller programme under special scheme of Agriculture Retinance Co-operation. The areas to be selected for Sheep and Dairy would be hilly and Backward areas of the State such as Bani Doda District Poonch Rajouri, Gool Gulabgarh, and Tardar. The rate of loaning to be achieved under the scheme would be about Rs. 7 per hectare. The total outstanding on the account would be Rs. 4.00 crores at the end of the 5th Plan period. 5% of this would have to be invested by the Land Development Bank by raising its own resources.

8. *Rehabilitation of weak coop. Banks*

An amount of Rs. 1.77 crores is due for conversion of credit advanced by the banks up to the year 1971-72. It is expected that

percent of this amount would be Bad & doubtful and incapable of recovery i. e. 8.86 Lakhs would have to be written off. Under the centrally sponsored scheme an amount of Rs. 4.43 lakhs would have to be provided within the State plan for assistance to the banks for writing of Bad & Doubtful debts. The rest of the amount would come under the centrally sponsored scheme from the Govt. of India.

MARKETING

Share capital to marketing societies for marketing of inputs.

The main objectives under marketing plan would be to consolidate the activities of the existing marketing societies and to assist the primary societies in achieving the level of financial stability required for the marketing of agricultural inputs and consumer goods. Agricultural inputs would not be marketed on a consignment basis at present but, each society would have to employ its own funds for this purpose. The present level of inputs being marketed is Rs. 5.77 per acre (1972-73). It is expected to step up this level of Rs. 25/- per acre at the end of the 4th plan period which would be approximately an amount of Rs. 3.5 crores annually. Assuming two turn overs during the year a share capital of Rs. 35.00 lakhs would be required by the marketing societies for borrowing on a 50% hypothecation. The existing share capital base is Rs. 12.00 lakhs and an additional amount of Rs. 13.00 lakhs is proposed to be contributed from Govt. and the rest to be raised by the societies.

Cadre of Key personnel for Marketing Societies.

It is contemplated to create a cadre of key personnel for marketing societies and regional and apex institutions the annual business turn over whereof exceeds Rs. 25.00 Lakhs.

Under the scheme it is proposed to provide

20 posts for primary marketing societies to function as Manager, 5 posts for regional apex Institutions to function as Managers Chief Accountants and two posts of for Apex Institutions to work as Chief Accountants, General Managers etc.

This will enable the departmental staff on deputation to Institutions to be withdrawn by stages. The total amount required to be provided as subsidy would be of the order of Rs.4.43 lakhs (subsidy being provided on a tapering basis for 2 year at 100% 66 2/3% and 33 1/3% respectively).

III. Consumer Co-operatives

1. Share capital to primary societies for consumer business.

The present level of consumer goods sold in the rural area through co-operatives is Rs. 14.22 per capita. It is proposed to increase this to Rs. 25/- per capita which would mean an annual turn over of Rs.3.5 crores and an additional turn over of Rs.1 crores. As the kind of goods to be sold in the rural areas would be fast moving items no stocks would be required to be kept at the primary level. On the basis of 5 turn overs, annually an investment of Rs. 20.00 lakhs would be required. To obtain adequate cash credit from the banks an amount of Rs.4.00 lakhs as share capital contribution is proposed to be given under the plan to primary societies.

2. Share Capital to Urban consumer stores.

In the case of consumer goods sold in urban areas through cooperatives, the present rate of Rs. 7.42 per capita is very low. It is proposed to increase the level of consumer business in urban areas to Rs. 40/- per capita which would mean a total turn over of Rs. 2.5 crores annually. Assuming 3 turn overs in view of the nature of goods to be sold in the urban market an additional share capital base of Rs. 6.00 lakhs would

be required in the urban consumer movement. It is proposed that 33% of the share capital is raised by the urban population and 66% contributed by Government. The outlay proposed, therefore, is Rs. 4.00 lakhs.

The contribution would be made to two kinds of societies. The first would be existing wholesale stores which would be encouraged to open out lots in towns with population of more than 5000. The second category would be existing Marketing societies in towns which do not fall within the area of wholesale stores. These societies would be strengthened to open outlets at their headquarters.

3.4. *Managerial subsidy for consumer stores.*

In the case of the rural consumer movement, most of the business is expected to be carried out through existing primary Co-operatives. As this would increase the viability of the societies, it is not proposed to subsidize any additional staff that may be employed. However, it is proposed that 10% of the total business should be carried out by purely consumer stores. In particularly backward areas, the total cost of management of this business is expected to be 2% annually. It is proposed that the cost of management is subsidized on a tapering basis for 3 years for amount of Rs. 1.00 lakhs will be required for this purpose.

In the case of urban consumer stores, managerial subsidy to the extent of 1% of the total annual business may be provided. The rest of the cost of management would be met by the stores themselves. Rs. 2.00 lakhs are accordingly provided.

IV. STORAGE

1. *Subsidy to Marketing Societies for construction of godowns*
2. *Subsidy to primary agriculture credit societies for construction of godowns.*

The present storage capacity in terms of

rural and marketing godowns is 62,000 tonnes of which 25,000 tonnes are in the form of rural godowns. A very substantial increase as proposed in storage capacity at the primary level whose demands have been to increase both for storage of inputs as well as for food grains. The principle is to provide each society where the need exists with at least one godown. It is proposed to increase the Rural godown capacity by another 14,00 lakhs tonnes during the 5th plan period. Rs. 40.00 lakhs is proposed as subsidy at the rate of 37½% of the total cost which has been worked out at Rs. 200/- per ton. The balance could be met from loans obtained from the National Co-operative development Corporation.

It is also proposed to increase the capacity of marketing society i.e. 7,000 tonnes all-told. The total godown capacity in the co-operative would, therefore, be 0.83 lakh tonnes at the end of the 5th plan period. An amount of Rs. 5.25 lakhs will be provided subsidy for the marketing godowns.

V. PROCESSING INDUSTRIES

1. *Share capital for processing units*

The Rice Milling capacity in the Co-operative Sector as well as in the public sector in the State now commands the major share of the total milling capacity. The main area of expansion of processing in the Co-operative Sector would be in the setting up of cold storage, oil mills and the processing of other Agricultural produce. It is expected that an investment of Rs. 1.00 crore would be made in the setting up of processing industries in the co-operative sector during the 5th plan period 80% of this investment would be obtained through the NCDC. The total capital to be raised would be in neighbourhood of Rs. 20.00 lakhs Rs. 15.00 lakhs will be provided as share capital contribution from the plan. The balance of Rs. 5.00 lakhs will be contributed by individual societies.

2. Share capital contribution to processing units in backward areas.

An amount of Rs. 2.00 lakhs is also proposed as share capital contribution for setting up of processing units in co-operative in backward areas. The total investment is expected to be of the order of Rs. 10.00 lakhs. These would be for processing of Dairy products wool etc.

VI. Co-operative in Backward Areas.

1. Share capital contribution to service societies.

It is proposed to set up 10 service societies for backward areas of the State. A share capital of Rs. 1.00 lakhs is proposed for each such unit. The activities of the societies would be tied up with the Medium term and long Term loaning in these areas and would be for the marketing base for the processing and marketing of the produce of the members. The areas tentatively selected are.

Jammu

1. Tawi Command Area
2. Budhal
3. Goolgulab Garh.
4. Bani.
5. Ramban.
6. Chenani.

Kashmir

1. Sogam.
2. Thandhar.
3. Kangan.
4. Noorabad

2. Managerial subsidy for service societies

The establishment of 10 service societies as proposed in the scheme mentioned above would require trained managers and technical personnel. Managers and Technical Assistants would be provided in each service society, in addition to Accountants. While no subsidy is proposed for Accountants in these service societies, as this would be set from the scheme of Accountants for Primary Societies, it is proposed to subsidize on a tapering basis for 5 years the cost of managers and Technical Assistants. These Assistants would be specialized in

Sheep or Animal Husbandry, Horticulture etc. depending on the main activity in the area in which the service society is set up. The responsibility of the assistants would be in providing technical assistants, health cover and arranging for inputs etc. In the service societies, an amount of Rs. 6.00 lakhs is proposed for the 5th plan period which would work out to Rs. 60,000/- per society over the 5th plan period.

Setting up of Training Centres.

An outlay of Rs. 8.00 lakhs is proposed as a block grant for the establishment of co-operative training centres. The Coop. training centres would be set up for the training of departmental staff, managerial personnel of the banks marketing and primary societies.

The administration, supervising and Statistical wings of the Department will be strengthened to affectively discharge the increased and varied responsibilities that will devolve upon the Department in the 5th plan.

Physical targets and Achievement.

S. No.	Item	Unit	Base level 5th Plan (1973-74 target)	
1	2	3	4	5
1.	Number of Pry. Agri. credit Societies	No.	1104	1404
2.	Short term loans advanced by Pry. Agri. credit societies	Rs in crores	5.00	12.00
3.	Medium term loan	-do-	1.20*	3.50*
4.	Long term loan advance by L. D. B.	-do-	2.44	4.00
5.	Agricultural produce marketing by coops.	-do-	3.00	15.00
6.	Fertilizer retailed by co-operatives	-do-	2.60	10.00
7.	Retail sale of Urban consumer goods	-do-	1.00	2.50
8.	Storage capacity of marketing godowns	000 tonnes	36.62	43.62
9.	Storage capacity of rural godowns	-do-	25.26	75.00
10.	Direct Finance by Commercial Banks.			
	i) Short term loans	Rs. in crores	..	3.00
	ii) Term loans	-do-	..	5.00*

* For the five years of the Plan.

Scheme wise Outlay.

Agricultural Credit and Co-operation.

(Rs in lacs)

Name of the Scheme	5th Plan outlay.
<i>Agricultural Credit.</i>	
Floatation of debentures by the Land Dev. Bank	40.00
TOTAL	40.00
Co-operation	
<i>i) Co-operative Credit</i>	
1. Loans to be raised by State Govt. for share capital contribution by B. B. I. in Coop. Institutoins.	119.00
2. Govt. Loans to individuals for purchase of shares in primaries	2.50
3. Opening of bank branches by C. C. Banks	8.50
4. Subsidy to Co-operative Banks for supervisory staff	7.00
5. Creation of cadre of Key personnel for Co-operative Banks	1.80
6. Cadre of Accountants for Primary Agricultural Societies	36.00
7. Subsidy to LDB and for branches primaries	2.67
8. Rehabilitation of weak Coop. Banks	4.43
Total	181.90
<i>ii. Marketing.</i>	
1. Share capital contribution to marketing societies for marketing of Agricultural inputs	13.00
2. Cadre of Key personnel for marketing societies	4.43
TOTAL	17.43

iii. Consumer Co-operatives.

1. Share contribution to Pry. Societies	4.00
2. Share capital contribution to Urban consumer stores	4.00
3. Managerial subsidy to Urban consumer Stores	2.00
4. Managerial subsidy to consumer of stores in backward areas	1.00
TOTAL	11.00

IV. Storage Accommodation:

1. Subsidy to Marketing Societies for construction of godowns	5.25
2. Subsidy to Pry. Agri. credit Societies for construction of godowns	40.00
TOTAL	45.25

V. Processing Including Cold Storage.

1. Share capital contribution to processing units	15.00
2. Share capital contribution to processing unit in Hilly and Backward areas	2.00
TOTAL	17.00

VI. Coop. in Backward Areas.

1. Share capital contribution to Service Societies	10.00
2. Managerial subsidy to service Societies	6.00
TOTAL	16.00

VII. Coop. Training & Education.

1. Assistance to State Coop. Union	8.00
2. Setting up of Coop. Try. Centres	8.00
3. Additional departmental staff	6.42
4. Strengthening of statistical cell	1.00
TOTAL	18.42
GRAND TOTAL	307.00

14. Panchayat C. D. and N. E. S.

By and large the panchayats in the State have been assisted in building of remunerative assets and maintenance of the works already constructed. Funds have been provided to various C. D. Blocks for construction works. A massive programme for crash rural employment, drought prone area programme a pilot intensive rural employment project were taken for execution under the category of Centrally Sponsored Programmes.

For the Fifth Plan an outlay of Rs. 53.00 lakhs and Rs. 58.00 lakhs has been included for panchayats and C. D. respectively.

S.No.	Name of the Scheme	Rs. in lakhs
Panchayats.		
1.	General grant-in-aid to Panchayats	30.00
2.	Grant for construction of Panchayat Ghars	8.00
3.	Grant for whole time employees of Panchayati Adalats	10.00
4.	Loans to Panchayats for building remunerative assets	10.00
Total		58.00

Community Development

1.	Publicity	3.00
2.	Rural Engineering	50.00
Total		53.00

Grant-in-aid to Panchayats

The total number of panchayats in the State, at present, is 1496. It is proposed to pay a general purposes grant-in-aid at the rate of Rs. 365/- to each panchayat. This, however, will be paid to only such panchayats as raise matching contribution to the extent of grant to be paid by the State Government.

Construction of Panchayat Ghars

Out of the 1496 Panchayats in the State, 400 panchayats are at present without panchayat Ghars. It is proposed that these remaining panchayats also construct panchayat Ghars so that the panchayat members are able to meet and organise panchayat activities. Average cost of a panchayat Ghar is estimated at Rs. 8,000. Of this 30 to 40 percent would be in the form of labour to be donated by the panchayats themselves. Cost of the material is estimated at Rs. 2,000. Each year 80 panchayats will be covered by payment of grant-in-aid.

Whole time employees for Panchayati Adalats

Under the amended Panchayat Act, Panchayati Adalats have to be constituted for a group of panchayats. It is considered necessary for each Panchayat to engage a whole time employee for each Panchayati Adalat. In the initial stages, it may not be

possible for the panchayats to meet the cost of the whole time employees. It is, therefore, proposed to provide a lumpsum grant of Rs. 4,000 to each Panchayati Adalat for a period of five years.

Loan to Panchayats for Building Remunerative Assets

It is proposed to continue the scheme of granting loans to panchayats for building remunerative assets at the rate of Rs. 15,000 per panchayat.

Rural Engineering

C. D. type works were being executed in border and non-border areas during the previous years which were of very minor

nature and designed to provide some relief in these areas and at the same time create employment. Such of the border blocks as are not included in specially backward areas have to be given special treatment. These blocks will have to be specially taken care of in the fields of development in agriculture, horticulture, animal husbandry, sheep husbandry etc.

Publicity

It is necessary to arrange due publicity for various works and programmes executed under C. D. and Panchayat Programmes. The outlay proposed is for meeting the cost of publicity and purchase of publicity material.

Chapter VII

Irrigation and Power

1. Major and Medium Irrigation

The main features of the irrigation programme implemented in the State so far have been described under the chapter Minor Irrigation. An area of 13.61 lakh acres of the total cropped area both in Rabi and Kharif seasons is still un-irrigated and is, therefore, dependent on the vagaries of the monsoons. In terms of percentage, the un-irrigated area at present, to the gross cropped area, works out to 63%. The position in the two provinces of Jammu and Kashmir is not, however, uniform. In the case of Jammu, 81% of the total cropped area is un-irrigated while in Kashmir, 42% of the area comes under this category.

2. Large scale conversion of the dry areas into wet areas by provision of irrigation, necessitates existence of large and compact block of land in the close proximity of river basins. The potential for existence of compact and extensive blocks of land in the two provinces vary. Detailed thought out investigations and surveys have to precede formulation of any technically feasible project. Keeping in view the magnitude and the size of the un irrigated area in Jammu Province, some medium irrigation works were started under the plan. These works were remodelling of the Partap Canal, Remodelling of the Ranbir Canal. Construction of Kathua Canal and the Dudhar Canal, Tawi Lift Canal and Remodelling of Pargoal Canal. The

ultimate irrigation potential in respect of these works is indicated below :—

	(000 Hect.)
Remodelling Ranbir Canal	12.00
Partap Canal	9.88
Kathua Canal	11.00
Dudhar Canal	1.30
Udhampur Canal	0.20
Tawi Lift Canal	13.48
Remodelling Pargoal Canal	1.12

4. Of the above works, remodelling Ranbir Canal, Pargoal Canal and Tawi Lift Project are at present under execution.

5. In the case of Kashmir, neither any major irrigation project nor medium project was taken up during the first three plans and instead attention was mainly devoted to the execution of minor irrigation programme. Now, that easily accessible areas have all been exhausted, recourse has to be taken to harness whatever water potential can be made available to irrigate more difficult areas, which are either located far away from the nearest river source or on much higher elevations. The cost, per acre, of such gravity schemes is in the neighbourhood of Rs.3000 to Rs. 4 000 per acre, while in case of being lift schemes the cost would go even as high as Rs. 5,000 because the lifts involve a range

of 300'-500'. Apart from the high capital cost, the high lift schemes are expected to prove very costly from maintenance point of view as well, unless electric power becomes available at reasonably cheap rates.

6. Pending detailed investigation of the high lift schemes involving lift beyond 300' and major dams on the tributaries of rivers, the following new medium irrigation schemes have been taken up in Kashmir Valley during the last year of the Fourth Plan :

Scheme	(Lakhs acres)		
	Rs in lakhs estimated cost	Culturable command area	Gross command area
Marvel Lift Project	241.00	0.16	0.28
Lathpora Lift Project	95.00	0.035	0.058
Niu Karewa Storage	94.00	0.065	0.10
Yusmarg Storage	42.55	0.016	0.028

7. Two more medium irrigation works such as Banimulla irrigation scheme estimated to cost Rs. 87.76 lakhs with an irrigation potential of 3,872 acres and Manual-Zora irrigation estimated to cost Rs. 42.30 lakhs with a potential of 1,409 acres have been prepared and are under examination with the Central Water and Power Commission.

8. For execution of various major and medium irrigation works an outlay of Rs. 2825.00 lakhs in the Fifth Plan as under has been included.

	(Rs. in lakhs)		
	Kashmir	Jammu	Total
Spill-over Works	391.35	281.56	672.91
New works	108.65	1,976.44	2085.09
Investigation and Research	34.00	33.00	67.00
TOTAL	534.00	2291.00	2825.00

9. An outlay of Rs. 672.91 lakhs will be required for completion of the works which are at present under various stages of execution and are to be carried over to the Fifth Plan. The works as also the outlay

for each of these works is indicated below: —

(Rs. in lakhs)

Jammu

1. Tawi Lift Project	175.17
2. Remodelling Ranbir Canal	88.18
3. Remodelling Pargoal Canal	18.03
4. Dudhar Canal	0.15
Total	281.56

Kashmir

1. Marval Lift	208.00
2. Lethpora Lift	76.25
3. Yusmarg Storage	27.45
4. Niu Kerawa Storage	79.65
Total	391.35

Total Jammu & Kashmir 672.91

10. Work on the above four medium irrigation schemes of Kashmir, two of which are lift works and two storage works, has been commenced during the latter period of the 4th plan. The total likely expenditure on those works during the fourth Plan will be Rs. 84.20 lakhs. These works will create an irrigation potential of 11.14 thousand hectares towards the close of the 5th plan and actual utilisation will start from the beginning of the sixth Plan when it is expected that irrigation on the entire area under the command of these works, which is estimated to be of the order of 11.58, thousand hectares, will develop. The actual utilisation of the potential during the last year of the Fifth Plan is, however, expected to be 4.20 thousand hectares.

11. Work on the Tawi Lift Project is in an advanced stage. The estimated cost of the work has revised to Rs 550.00 lakhs against its approved cost of Rs. 517.00 lakhs. It has been commissioned in December 1973 creating an irrigation potential of 1500 hectares against the total ultimate potential of 13.48 thousand Hactares. The actual

utilisation of the potential ending the 4th Plan is expected to be of the order of 700 hectares. Full utilisation of Potential will be achieved by the end of the Fifth Plan. Work on the remodelling of Ranbir Canal is also in progress and it is expected that against the total approved cost of Rs. 130.46 lakhs, an expenditure of Rs. 92.28 lakhs will be incurred on it by the end of the 4th Plan. This scheme will irrigate an additional area of 12 thousand hectares mostly in Rabi inclusive of stabilisation of the existing irrigation large area of agricultural land. Part benefits have already started accruing. The remodelling of Pargoal canal estimated to cost Rs. 40.50 lakhs, is under execution. The scheme is expected to provide part benefits by the end of Fourth Plan. This however, envisages stabilisation of irrigation.

New schemes

12. For new works an outlay of Rs. 2085.09 lakhs has been included in the Plan. The schemewise distribution of this is indicated below :—

(Rs. in lakhs)

Kashmir

1. Banimulla Irrigation Project	73.35
2. Manual Zora Lift Project	35.30
Total	108.65

Jammu

1. Ravi Canal	1425.00
2. Rajal Canal (Reasi District)	200.00
3. Ranjan Lift Irrigation (Jammu District)	151.99
4. Other schemes in Poonch and Rajouri	200.00

Total Jammu 1976.44

Total Jammu & Kashmir 2085.09

13. A brief description of the new works is given below :—

Banimulla Irrigation Project.

14. The scheme envisages construction of a 10 Km. long main canal taking off from Vashow Nallah, with a carrying capacity of 70 cusecs which shall, after running in this length bifurcate into branches. The right branch shall irrigate the land in Banimulla valley and the left branch the lands in the villages of Khaloor, Chambgund etc. The scheme will provide irrigation to an area of 3872 acres during Kharif and 2472 acres during Rabi. The estimated cost of the project is Rs. 87.76 lakhs.

Manual Zora Irrigation Project.

15. The scheme envisages taking of a canal 13 Kms long from the left bank of river Ranbiara near Kadalbal for extending irrigation to an area of 1,409 acres during kharif for growing of maize. The total cost is estimated at Rs. 44.00 lakhs.

Ravi Canal

16. This is a major irrigation work to be undertaken in the State for the first time. The cost is estimated at 29.84 crores. After its completion and full development of irrigation, the work is expected to create an irrigation potential of 53,000 Hect. (1.33 lakh acres) in the Kandi belt between rivers Ravi and Ujh in the Tehsils of Kathua and Hiranagar, where compact blocks of agricultural land are available and can be commanded by such a major irrigation work. Execution of the scheme will enable utilisation of the State's share of water of the Eastern rivers and will substantially increase in the agricultural production besides creating an impact in the economy of the kandi area. The project has been divided into two parts. The first part would be from the River Ravi to River Ujh and the second part from the level

crossing at Ujh and to canal from Jun to tail. Cost of each part is estimated at Rs. 15.00 crores. Part first of the project which consists of weir areas the River Ravi tumelling and canal works will be taken up during the 5th Plan.

Rajal Canal Rajouri

19. The scheme is estimated to cost Rs. 210.00 lacs and will, on completion and full development irrigate a gross area of 5,000 acres in the backward area of Rajouri District. Investigation of the scheme has been completed and the project estimate is under formulation.

Ranjan Canal Lift Scheme

20. The scheme was originally included in the 4th Plan with an outlay of Rs. 16.00 lacs but could not be executed so far. The project estimate of the scheme costing Rs. 225.00 lakhs has been prepared afresh. The scheme after completion and full developments is expected to irrigate an area of about 9,000 acres (gross).

Other Schemes in Poonch and Rajouri

Poonch and Rajouri are two most backward districts apart from their closeness to the border. Agriculture is primitive in these areas. Any development and increase in production is conditioned by introduction of new techniques and extension of irrigation. Survey and investigation of various irrigation schemes is in hand such as Parnai and Ans-Sanhari which will provide irrigation to new areas and stabilize the existing irrigation.

Investigation

In view of the experience during the calamitous droughts of the previous years, it is proposed to take up detailed investigations on an extensive scale, the possibilities of constructing high dams on tributaries of rivers wherever possible in Kashmir Valley. In this context geological investigations have

already been taken up for a number of sites. Engineering surveys have been completed in some cases. After completion of the geological surveys detailed schemes will be prepared. The investigation of the following schemes will be taken up:—

1. Dam at Nagum Kandi Nallah (Veshow Basin)
2. Dam at Botengo at Khidar Nallah.
3. Dam at Warripora at Hamal Nallah (Pohru Basin)
4. Dam at Balapathri at Ningli Nallah.
5. Dam at Drung on Ferozpur Nallah.
6. Dam each at Kalarossa and Warno on Lolab Nallah.
7. Dam at Vailo on Bringi Nalla
8. Dam at Tarlri on Satkujan Nalla.
9. Dam at Chakibal on Kamil Nallah.
10. Dam at Lidder Nallah.
11. Dam at Banyari.

It is also proposed to carry out detailed investigation on the construction of Ring Zabal canal and for taking a high level canal from Ferozpur in the valley.

Regarding irrigation of Karewa lands in the valley, there appears to be limitless possibility available in future and it should not be difficult with the modern expertise and technology to extend irrigation to at least an area of 0.45 lakh acres out of the total potential of more than 1.92 lakh acres under various modes of irrigation ranging from damming of the tributaries and diverting their flow for irrigation of table lands leaving all water from the near-by tributaries to irrigate them by lifting water direct from Jehlum

through long feed channels and series of pump stations enroute. Execution of such major works will require availability of cheap electric power. Investigation of the following lift works will be taken up :—

1. Sprinkler Lift Irrigation Scheme.
2. Sangrama Lift Scheme.
3. Tral-Rajpora Lift Scheme.
4. Koil Karewa Lift Scheme
5. Janbazpora Lift Scheme.
6. Sempora Lift Scheme.

After completion of survey and investigation and project such of the schemes as might turn out to be comparatively promising from the point of increase in production, employment and impact on the economy will be taken up. This will consequently necessitate revision of the outlay for major and medium irrigation sector.

After completion of the Ravi Canal in Jammu division, there will be hardly any scope for execution of major irrigation works in that province. However, medium irrigation works can be considered at some places. It is, therefore, proposed to undertake investigation of Doda Canal and that of Reasi Canal.

For detailed survey and investigation on various projects, the investigation agency will be adequately strengthened

Research.

Launching of irrigation projects will necessitate applied research and quality control of the highest proficiency in the coming years, high testing material, testing compaction, stability - analysis, determining of cohesion and coefficient of friction would be followed by more sophisticated techniques of model testing in the long run.

Training of personnel in various fields and strengthening of research laboratory is, therefore of vital importance for building strong research base in irrigation. Besides this type of research, it is necessary to conduct research into the optimum water utilization under the local conditions, use of local material for construction purposes, canal lining in semi-hilly areas and model testing. These programmes will be undertaken in the 5th plan.

Gross Area under Medium Irrigation	Unit 000 Hect	Achieved upto 1968-69	IVth Plan Target	Anticipated 1973-74 IV Plan	V Plan target
Potential					
Kashmir	000 Hect.	2.01	2.01	2.01	13.15
Jammu	-do-	76.69	87.01	81.81	108.01
TOTAL ..	-do-	78.70	89.02	83.92	121.16
Utilization.					
Kashmir	-do-	1.92	2.01	2.01	6.22
Jammu	-do-	74.13	84.61	78.11	102.03
TOTAL ..	-do-	76.05	86.62	80.12	108.25

1 Kishtwar Canal

Kishtwar is a backward pocket in the Doda District of Jammu Division. The culturable area is 5,000 acres of fertile land. The area has been suffering from constant droughts duly affecting, very adversely, agricultural operations and productivity. The area is as such scarcity stricken requiring heavy transportation cost and subsidy for meeting the food requirements of the people. Un-employment and under-employment is the common feature of the area.

There are some Zamindari kuhls with a command of 2,000 acres for kharif season. These have however, fallen into disuse consequent upon poor maintenance and upkeep as it is beyond the resources and technical capability of the farmers. The irrigation has consequently fallen to 150 acres. For development of the agriculture in the area and to rebuild the rural economy, it is necessary to revitalize and extend the irri-

gation system. Excavation of a canal was taken up years back on which expenditure to the extent of 29.00 lacs was incurred. The work had to be abandoned on technical and economic considerations. Subsequently some alternatives were investigated. One of these is to lift water from the Chenab. This, however, is bound to involve very high cost both in the form of initial investment and annual operation charges. Availability of cheap electric power is another crucial factor for consideration of such an alternative. This is not, as such considered to be feasible. The second alternative is to take a gravity canal for providing irrigation to a gross cropped area of 8,000 acres of land. The cost is estimated to be Rs. 339.00 lakhs. The work is not included in the States 5th Plan. It is likely that the work will be taken up as a Central Project.

2. Flood Control

The history of Kashmir is synonymous with the history of floods. As the topography would suggest, the Valley may never attain immunity from high floods; only the rigours could be mitigated by planned development of flood protection works. The problem has to be viewed in its entirety and the Master Plan of Flood Control along with irrigations as a whole is imperative. Not only irrigation but the entire rural and urban development of the major part of Kashmir valley is contingent upon its flood protection.

The first part of the major flood control schemes in the valley viz. deepening and widening of the outfall Channel has been proceeding on a slow pace. A re-appraisal of the project is being made of the short-fall channel project. The ideal solution would have been to concentrate on large scale soil conservation in the upper catchments, but this is a problem which is to be tackled on a long term basis and its full gestation period is comparatively large. The Forest Department is already seized of it, and soil conservation works on the Pohru catchment have

been taken up under the category of the Centrally Sponsored Programme and are in hand.

3. The River Training works meanwhile will be continued on the lines delineated in basinwise master plans. Similarly the dredging of the outfall Channel will be continued at a desirable pace. The revised cost of the project estimated previously at 13.00 crores now stands at Rs. 22.00 crores but is liable to go up further. The output in terms of effective work done below winter water level is hardly 32% which naturally calls for expeditious action on the project.

4. In Jammu much work was not done in this field during the past Plan periods. However, a number of important works were executed during the 1st two plans primarily, in the Jammu District to check the erosion of land.

5. Besides, some perennial rivers and nallahs, there are quite a good number of seasonal nallahs in the province which get inundated during rainy season. These nallahs cause considerable erosion of the agriculture lands and spread debris on the submerged areas during floods.

6. The main problem of flood control is in the district of Rajouri and Poonch and in the plan tract from Ravi to Chenab. There is very little cultivable land in the Poonch and Rajouri Districts and whatever land is available, it is situated between the river and nallah banks and the foothills. These blocks of land situated on the banks of flashy rivers are subject to constant erosion and inundation during floods. Likewise the fertile irrigated lands situated between River Ravi and Manawar Tawi are also subject to erosion and inundation.

7. After the unprecedented floods of 1957 and of 1959 when large areas of agricultural land were either eroded or rendered uncultivable, the necessity of flood protection measures was greatly felt in the provi-

nce. A Master Plan for all the three river basins of the Division was prepared in 1962 fixing priorities for various works. Since then flood control works in all the three basins of the Division are being executed according to the Master Plan and a large area has been protected from the Flood on slaught besides reclaiming about 1500 acres of such agricultural land. The floods of August 1973 were also much alarming

8. An outly of 800.00 lakhs has been included in the 5th Plan for Flood Control programme as under:—

Division	(Rs. in lakhs)		
	Spill over works	New works	Total
Jammu	53.95	178.05	232.00
Kashmir	410.11	157.89	568.00
Total :	464.06	335.94	800.00

9. The outlay proposed for spillover works is meant to complete the works which are at present in various stages of execution and are to be carried over to the Fifth Plan. For new works outlay proposed is Rs. 335.94 lakhs.

10. In order to make the river Jehlum navigable it is proposed to construct barrages in Kashmir Valley. Details for this are being worked out and will form a separate project by itself. Execution of the works would depend upon technical feasibility and availability of resources.

11. The other cardinal components of the flood control scheme viz. laying of flood absorption basins in the tributaries for modulating floods have also been provided for under the investigations.

12. Remodelling of the Flood Spill Channels and construction of a barrage at Parimpora near Srinagar besides flood absorption basins above Srinagar, are other important works proposed to be taken up in the 5th Plan.

13. In the case of Jammu, the Master Plan for Flood Control prepared some years back is being revised in the light of changing conditions of the fleshy rivers and Nallahs, both perennial and seasonal. A revised Master Plan for Ravi Jehlum basins has been prepared. Preparation of similar plan for Chinab basin is in hand. The works proposed to be executed during the Fifth Plan are included in the Master Plan.

ANNEXURE I

Schemewise Physical Progress of Medium Irrigation Schemes costing upto Rs. 5.00 crores

S. No.	Name of the Scheme	Date of commencement.	Target date of completion.	Approximate percentage of physical progress to end of 1973-74.		Anticipated date of completion
				Head works	Canal system	
1	2	3	4	5	6	7
A—Continuing Schemes						
Kashmir						
1.	Marval Lift-Scheme.	1/1973	3/1978	20%	16%	3/1978
2.	Lethapora Lift Scheme.	1/1973	3/1977	20%	20%	3/1977
3.	Yusmarg Storage Scheme	3/1973	3/1976	15% of the Dam	..	3/1977
4.	Neu Karewa Storage Scheme.	3/1973	3/1977	15% of the Dam	..	3/1977
TOTAL A		..	..	..	..	..
B—New Schemes of 5th Plan :						
1.	Sprinkler Irrigation Scheme.	..	..	..	..	..
2.	Sangrama Keriri Irrigation Scheme	..	..	..	..	..
3.	Tral Rajpora Lift Scheme	..	..	..	..	..
4.	Koil Kawewa Lift Scheme.	..	..	..	..	..
5.	Janbazpora Lift Scheme.	..	..	..	..	..
6.	Sempora Lift Scheme.	..	..	..	..	..
7.	Banimulla Lift Irrigation Scheme.	4/75	4/80	..	..	4/80
8.	Mantal Zowra Lift Scheme.	4/75	4/80	..	..	4/80
9.	Ring Zabal Khul	..	..	..	..	..
10.	High Level Ferospora Canal.	..	..	..	..	..
11.	Ningli Dam.	..	..	..	..	..
12.	Varhoo Dam	..	..	..	..	..
13.	Kandia Storage Scheme.	..	..	..	..	..
14.	Bringi Storage Scheme.	..	..	..	..	..
15.	Botengoo Storage Scheme.	..	..	..	..	..
16.	Lidder -do- with extension of Tral Valley	..	..	..	..	..
TOTAL		..	..	..	..	..
A—Continuing Schemes :						
Jammu						
1.	Remdlg. Ranbir canal	1968-69	1978-79	70%	50%	1976-77
2.	Ramdlg. Pargwal canal	1970-71	1976-77	90%	40%	1976-77
3.	Dudder canal	1966-67	1972-73	100%	100%	1971-72
4.	Ranjan Lift Irrigation Scheme	1973-74	1979-80	..	..	..
5.	Manawar Tawi Lift Irrigation Scheme	..	..	..	..	..
B—New Schemes of Fifth Five Year Plan						
1.	Parnai canal	1978-79	1983-84	..	..	..
2.	Rajal canal	1974-75	1980-81	..	..	..
3.	Ans Sanskari canal	1978-79	1982-83	..	..	..

ANNEXURE II

Check list in respect of principal projects costing Rs. 5.00 crores and above

Name of the State :—Jammu and Kashmir

1. Name of the project with brief description, location. Ravi canal Project envisages the construction of 86 Kmrs. long lined channel to utilise the states share of Ravi Waters. The canal will take off from the bank of river Ravi D/S of tail race of the Power plant. The canal with a designed discharge of 1150 cusecs at take off point will run along contour from River Ravi in the East to Aiknadi (Chak Salgrain) in the West and will command an area of 79,500 acres and the annual cropped area will be 1,33,200 acres.
- b) Districts benefitted. Jammu and Kathua.
- c) In case of multipurpose and interstate project details of sharing of cost and benefits among various purposes and states may be indicated. It is single purpose irrigation project involving J & K State alone.
2. Date of commencement. Preconstruction works in 1973-74.
3. Estimated during of completion. Actual execution in 1974-75.
Year 1980-81
4. Cost of estimates and outlays :—

(Rs. in lakhs.)

Total	Foreign exchange	H/work canal Disty-System	150 2675 159
-------	------------------	------------------------------	--------------------

2984

Approved Cost

c) Outlay and expenditure Expenditure 1968-69		Outlay approved 69-64	Expenditure 69-72 72-73 Actual. Anti	73-74 outlay approved	Total Fourth Plan	Fifth Plan outlay	
Total	F. exchange	Total	F. exchange	Total	F. exchange	Total	F. exchange
..	..	..	..	..	..	..	1425.00
Programme output benefits Unit		Progress up to 68-69	Target for Fourth Plan	Achievement upto end of 71-72 72-73 73-74	Target for Fifth Plan	Reasons for shortfall in target of benefits to end of Forth Plan and lag in Utilisation and action taken/proposed to be taken...	
i) Potential	000 Hect.	..	..	..	..	..	As the irrigation potential will be created at the end of 5th Five years Plan only no utilisation is possible during the plan.
ii) Utilisation	000 "	..	..	..	..	..

6. Employment date (Man-days)

a) Labour requirement during the construction phase.

Year	Degree	Skilled Labour Diploma	Ministerial non-tech.	Skilled	Un-skiled labour per working days.
1971-72	5	9	24	100	1000
1972-73	24	97	185	450	6000
1973-74	38	127	306	700	7000
1974-75	38	127	306	700	7000
1975-76	38	127	306	700	7000
1976-77	38	127	306	700	7000
1977-78	8	127	306	700	8000
1978-79					

Estimated requirements of labour during the operational/ Maintenance phase.

<i>skilled personnel</i>			<i>Un-skilled personnel</i>
Degree	Diploma	Non-technical	
1971-72	
1972-73	
1973-74	
1974-79 (Fifth plan)	
Completion of all phases of projects :—			1980-81

7. Indicate the various main components of project (Dams, Headworks, (Main canals and distribution system) completed upto 1971-72 likely to be completed during 1972-73 and the works be taken up during 1973-74 and the Fifth Plan and the outlays proposed on these components during 1973-74 and the Fifth plan

No components completed upto 1971-72, or during 1972-73. Only preconstruction works such as construction of Buildings for accommodation of staff and offices are proposed to be taken up during 1973-74.

During 5th Plan construction of main canal, Head works, and diversion structures and cross drainage and distribution system upto Bein Nallah to be completed. Proposed outlay during 5th Plan is Rs. 20.00 crores.

1. Name of Project with brief discription, location, and districts benefited. Improvments to Outfall Channel below Wullar lake for flood protection of Kashmir Valley.
2. Date of commencement 1962
3. Estimated date of completion The project is expedited to be completed by the end of 6th Plan, due to paucity of funds.
4. Cost estimates and outlay.
- | | |
|----------------------------|---------------|
| a) Approved cost | 1360.00 lakhs |
| 1) Foreign Exchange | 137.00 lakhs |
| b) Revised cost | 2200.00 lakhs |
| 1) Foreign Exchange | 137.00 lakhs |
| c) Outlay and expenditure. | |

Expenditure ending		Outlay approved		Expenditure		Approved outlay		Total 4th Plan		5th Plan outlay	
68-69		1969-74		69-72 72-73		1973-74					
Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.
823.94	87.00	304.00	14.00	136.20	33.30	25.00	..	194.50	..	300.00	..

5. Programme of output benefits : The targets for flood control schmes can not be judged in terms of additional acreage brought under Irrigation. The scheme is essentially a protective one which aims an improving drainage of the Valley and safe guarding for cultivated land from in addition. On completion of the scheme, it is expected that 1.00 lac acres below and a round Wullar lake and about 0.40 acres above Wullar will be protected. In addition, the flood scheme will prevent damage to the property and life. The scheme envisaged improvement in the discharge carrying capacity of the outfall channel to 40,000 cusecs from Sopore to Dobgah and 0.45 cusecs down stream of Doabgah upto Khadanyar. The capacity has already increased by 50% and on completion of the work 100% increase is expected.

6. Employment data (Mandays).

a) Labour requirement during the construction phase.

	<i>Skilled personnel</i>			<i>Un-skilled</i>
	Degree	Diploma	Non-technical	
71-72	34	57	94	94,000 Nos.
72-73	34	57	94	60,000 Nos.
73-74	34	57	94	50,000 Nos.
5th plan				
74-79	..	..	..	7,00,000 Nos.

ANNEXURE III

Major and Medium Irrigation

Physical targets and achievements

Gross area and Medium Irrigation		Unit (000) Hect.	Achieved upto 1968-69	IV Plan Target	Achievements		Anticipated	Proposed	V Plan Target	
					1969-70	70-71	71-72	72-73	1973-74	
1	2	3	4	5	6	7	8	9	10	
<i>Potential</i>										
Kashmir	..	(000) Hect.	2.01	2.01	2.01	2.01	2.01	2.01	13.15	
Jammu	..	(000) Hect.	76.69	87.01	79.33	80.65	81.01	81.41	108.01	
TOTAL	..	(000) Hect	78.70	89.02	81.34	82.66	83.02	83.42	121.16	
<i>Utilization</i>										
Kashmir	..	(000) Hect	1.92	2.01	2.01	2.01	2.01	2.01	6.22	
Jammu	..	(000) Hect	74.13	84.61	75.85	77.33	72.48	76.13	102.03	
TOTAL	..	(000) Hect	76.05	86.62	77.86	79.34	74.49	78.14	108.25	

ANNEXURE IV

Schemewise benefits for major and medium irrigation schemes

(000 hectares)

[illegible]

Lift Schemes

Gravity Scheme.

Small Dams and S. Tanks

JAMMU

Completed Schemes

Major Scheme

Medium Schemes

Ranbir canal	..	Jammu																	
		R S Pora																	
		Bishnah																	
		Samba																	
		Tehsils	58.13	58.13	58.13	58.13	58.13	58.13	58.13	58.13	58.13	58.13	54.00	58.13	58.13	58.13	58.13	58.13	58.13

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2. Partap canal	Akhnoor Tehsil	9.88	8.00	5.44	9.88	9.88	9.88	6.40	9.88	6.88	9.88	6.00	9.88	6.00	9.88	6.88	9.88	9.88	
3. Kathua canal	Kathua & Hiranagar Tehsil	11.00	10.00	10.40	..	10.72	10.72	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.10
4. Dudar canal	Udhampore Tehsil	1.30	..	..	1.20	1.20	..	..	0.80	0.48	0.80	0.60	0.80	0.80	0.80	1.20	1.20	1.20	
5. Udhampore canal-do-		0.20	0.16	0.16	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
TOTAL		80.41	76.69	74.13	80.41	80.41	78.93	75.45	80.61	76.69	80.41	71.84	80.41	75.13	80.41	77.41	80.41	80.41	
TOTAL I&II		..	80.41	76.69	74.13	80.41	80.41	78.93	75.45	80.61	76.69	80.41	71.84	80.41	75.13	80.41	77.41	80.41	80.41

B—Continuing Scheme

Major Schemes

1. Tawi lift canal	Jammu	13.48	..	..	4.00	1.60	..	..	..	..	..	..	..	..	1.50	0.07	13.48	10.00
	R.S. Pora																	
	Tehsil																	
TOTAL	..	..	13.48	..	..	4.00	1.60	..	..	..	..	..	..	..	1.50	0.07	13.48	10.00

II. Medium Schemes

1. Remodlg. Ranbir canal	Jammu, R.S. Pora Bishnah Tehsil	12.00	..	..	2.00	2.00	0.40	0.40	0.64	0.64	0.64	0.64	1.00	1.00	1.00	1.00	10.00	10.00
2. Remodlg. Pargoal canal	Akhnoor Tehsil (Pargoal area)	1.12	..	..	0.60	0.60	..	..	..	..	..	..	..	..	..	..	1.12	1.12
3. Ranjan lift Irri. sch.	Jammu Kandi area of Jammu Tehsil	3.60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2.00	0.50
TOTAL	..	16.72	..	..	2.60	2.60	0.40	0.40	0.64	0.64	0.64	0.64	1.00	1.00	2.60	2.60	13.12	11.62

c) *New Schemes*

I. Major Schemes

Ravi canal	Kathua & Hiranagar Tehsil	53.20	079	080	081	082
------------	---------------------------------	-------	----	----	----	-----	-----	-----	-----	----	----	----	----	----	----	----	----

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Medium Schemes																			
Kishtwar canal	Doda																		
	Kishtwar Tehsils	2.80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Reasi canal	Udhampore																		
	Reasi Tehsils	0.40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Parnai canal	Poonch																		
	Mendhar Tehsils	1.60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ans Sankari canal	Rajouri																		
	Tehsil	1.12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rajal canal	Rajouri																		
	Nowshera Tehsils	2.20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL (II) ..		7.92	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL C (I&II)		61.12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL A to C		171.73	76.69	74.13	87.01	84.61	79.33	75.85	80.65	77.33	81.01	72.48	81.41	76.13	81.91	78.11	108.00	102.03	
AND TOTAL		173.74	78.70	76.05	78.01	84.61	81.34	77.86	82.66	79.22	83.02	74.22	83.42	78.14	83.92	80.12	110.01	104.04	

ANNEXURE V

Physical achievements from Flood Control, Drainage and Anti-Sea-Erosion Scheme

Item	Constructed upto 68-69	Target for the fourth plan	Likely achievement in the fourth plan	Fifth plan target.
Kashmir				
Length of Embankment ..	495 Km.	..	..	..
Town Protection works ..	16 Km.	7000 Houses	3464 No houses	3400 Nos.
Raising of villages (Nos.) providing of platforms ..	..	4 Nos.	4 Nos.	..
Length of Drainage Channel,				
i) Flood Spill Channel ..	45 Km.	..	..	..
ii) Outfall channel (% of excavation in length of 18 Km.	20%	80%	25%	10%***
Area to be benefited (Acres)	N.A.	44785	26505 (acres) cumulative	35000 (acres) cumulative
Length of sea well ..	..	..	..	..
***The major portion under this category is Improvement of out-fall Channel below Wullar. By completion of this scheme damages worth Rs. 10 crores which were caused to the crop, live stock,, Houses and property and area of 80,000 acres was in-undated during the floods of 1957 and 1959. The project would as such be a safe guard against such a colossal damage.				
J a m m u				
Length of embankment (Km.) ..	32.33	53.17	48.865	74.00
Town protection works (Nos.) ..	6	4	4	..
Raising of villages (Nos.) ..	..	..	..	..
Legnth of drainage Channels (Km.) ..	0.079	0.13	0.123	0.185
Area to be benefited (Lac hect.) ..	..	..	..	..
Length of sea wall Km.) ..	..	..	..	..

ANNEXURE VI

Progress on Investigation of projects

S. No.	Name of the scheme under investigation	Likely date for completion of investigation.	Probable date of preparation of project report	Rough cost of the Preparation of project report	Annual Irrigation ((approximate 000 hect. (Gross)	Districts likely to be benefited
1	2	3	4	5	6	7

Jammu Division

1.	Ranjan Lift Scheme ..	..	Already completed	1974	Rs. 2.00 Lacs	3.60	Jammu
2.	Rajal Canal ..	..	1974	1974	Rs. 3.00 Lacs	2.00	Rajouri
3.	Kishtwar Canal ..	..	Completed	Completed	Rs. 6.00 Lacs	2.80	Doda
4.	Parnai Canal ..	..	1974	1974	Rs. 6.00 Lacs	1.60	Poonch
5.	Des Doda Canal ..	..	September 1976	1977	Rs. 2.00 Lacs	1.12	Doda
6.	Reasi Canal ..	..	September 1974	1975	Rs. 2.00 Lacs	0.40	Udhampur
7.	Ans Sanskari Canal ..	..	1974	1974	Rs. 3.00 Lacs	1.12	Rajouri

Kashmir Division

1.	Storage Scheme Waripora	1975-76	1976-77	15.00 Lacs	8000	Baramulla
----	----------------------------	----	---------	---------	------------	------	-----------

Medium Schemes Lift Schemes

1.	Sprinkler Irrigation ..	..	1974	1974-75	1.00 Lacs	1500	Anantnagh
2.	Sangrama Lift Scheme ..	..	1974	1974-75	7.00 Lacs	7000	Baramulla
3.	Tral Rajpora Lift Scheme ..	..	—do—	—do—	3.00 Lacs	8000	Anantnaghh
4.	Koil Karewa Scheme ..	..	—do—	—do—	6.00 Lacs	6000	Anantnagla
5.	Janbazpora Scheme ..	..	—do—	—do—	2.00 Lacs	2000	Baramul
6.	Sempora Lift Scheme ..	..	—do—	—do—	2.00 Lacs	2000	Srinagar

b) Gravity Schemes

7.	Banimulla Irrigation Scheme ..	..	Already completed	—do—	1.40 Lacs	3872	Anantnagh
8.	Manual Zowra Scheme ..	..	Already completed	—do—	0.62 Lacs	1409	Anantnagh
9.	Ring Zabal Canal ..	..	1974	—do—	0.80 Lacs	1200	Srinagar
10.	High level Ferozpora Canal ..	..	1974	—do—	0.80 Lacs	1500	Baramulla

c) Small Dams and Storage Tanks

11.	Ningli Dam ..	..	1976-77	1977.78	2.00 Lacs	10,000	Baramulla
12.	Varnoo Dam ..	..	—do—	—do—	5.00 Lacs	15,000	—do—
13.	Kangan Storage Scheme ..	..	—do—	—do—	6.00 Lacs	10,000	—do—
14.	Bringi Storage Scheme ..	..	—do—	—do—	4.00 Lacs	7,000	Anantnagh
15.	Botengoo Storage Scheme ..	..	—do—	—do—	2.40 Lacs	3,000	—do—
16.	Lidder Storage with extension of Irrigation to Tral Valley ..	..	—do—	—do—	3.00 Lacs	8,000	—do—

ANNEXURE VII

Present Organisation and outlays for investigation and Research

S. No.	Items	Overall water re-sources planning	Investigations and prepara- tion of individual scheme	Research
Jammu				
1.	Organisational set up (attach organisational Chart).			
2.	Number of persons engaged.			
i)	Engineering Graduates .. .. .	..	21	
ii)	Engineering Diploma Holders .. .. .	..	54	
iii)	Scientists .. .. .	..	12	
iv)	Ministerial staff .. .. .	..	26	
v)	Skilled personnel .. .. .	..	..
vi)	Unskilled personnel .. .. .	..	..
vii)	Others .. .. .	..	23	
3.	Present annual expenditure (Rs. in lacs)			
i)	Within state Plan		2.45	
ii)	From other sources			
a)	General assistance for investigations in the context of providing employment for Engineers and other Technical personnel .. .. .	..	2.35	
b)	Special Employment programme etc. (Rural Engineering surveys) .. .. .	..	2.40	
Kashmir				
1.	Organisational set up attach (Organisation chart)			
2.	No. of persons engaged.			
i)	Engineering Graduates	5	13	X
ii)	Engineering Diploma Holders	16	56	X
iii)	Scientists	X	X	3
iv)	Ministerial staff	17	29	X
v)	Skilled personnel	X	X	X
vi)	Un-skilled personnel	X	X	X
vii)	Others	X	X	X
3.	Proposed Annual Expenditure (Rs. in Lakhs).			
i)	Within state plan	4.00 lacs	10.00	4.00
ii)	From other sources			
a)	Control assistance for investigations in the contest of providing em- ployment for engineers and other technical personnel	Nil	15.15 laes	3.57
b)	Special employment programme etc.	6	21	6
i)	No of graduates	14	66	6
ii)	No. of Diploma Holders			

ANNEXURE VIII

Organisational Chart Sanctioned for Major and Medium and Flood Control Works

S.No.	Particulars	E N G A G E D O N			Total
		Major & Medium Irrigation	Flood Control Works		
			Civil	Mechanical	
1	2	3	4	5	6
1.	Chief Engineer	0.2	0.3	X	0.5
2.	Superintending Engineer	0.25	1.00	1.00	2.25
3.	Tech : P. A.	0.2	0.3		0.5
4.	Officer on special duty	..	1.00	..	1.00
5.	(a) Divisional and Sub-Divisional Organisation				
	i) Irrigation Const. Div. Sgr. i) P. & D. Div. Srinagar Dredging Div. No. 1				
	1. Yumarg Sub-Division 1. Side Channel sub-division 1. Three Sub-Division				
	2. Neu Karewa Sub-Div 1 2. Invest. Sub-Division 2. Other Technicians=17				
	3. -do- II 3. Central Sub-Division				
	4. -do- III 4. Discharge Sub-Division				
	5. Sec. Officer=16 5. Sec. Officers=17				
	2. Irrigation Const. Div. Pulwama. 2. Flood Const. Division Baramulla 2. Dredging Division No. II				
	1. Harval Sub-Division 1. Bla Sub-Division 1. Two Sub-Divisions				
	2. Main Canal Division 2. Sopore Sub-Division 2. Other technicians=13				
	3. Chatergam Division 3. Colony Sub-Division				
	4. Letapora Division 4. Sec. Officers=10				
	5. Khrew Sub-Division				
	6. Sec. Officers=16				
	3. Survey. & Invest. Division North Bla 3. Srinagar Hydel Division 3. Field Mechanical Division				
	1. Bala Sub-Division 1. Project Sub-Division 1. 2 Sub-Divisions.				
	2. Kupwara Sub-Divisions 2. City Sub-Division 2. Other Technicians=60				
	3. Tangmarg -do- 3. Sangam -do-				
	4. Sangrama -do- 4. Narbal -do-				
	5. Rathan Sub-Division 5. Sectional Officers=21				
	6. Sec. Officers=17				
	4. Survey & invest. Division South Anantnagh .. Stores and Workshop Division Bla				
	1. Qazigund Sub-Division 1. Three Sub-Divisions.				
	2. Awantipora Sub-Division 2. One Sub-Divisional Officer				
	3. Kotsu Sub-Division 3. Two Chief Foreman				
	4. Shangas Sub-Division 4. Other Technicians=78				
	5. Kandii Dam Sub-Division				
	6. Sprinkler Sub-Division				
	7. Sectional Officers=21				
6.	Extra Assistant Engineers	..	..	..	11
7.	Survey Units	..	..	..
					Tech. Asstt.=10 Sec. Officers=20 Draftsman=10

ANNEXURE IX

Employment of Persons in the Fifth Plan in the Irrigation Flood Control Sector

No.	I T E M	Number of persons already employed upto 1972-73	Number of persons likely to be employed in 1973-74	Additional number of persons likely to be employed in the Fifth Plan
	2	3	4	5

Jammu Division

Persons employed by the Department (attach Organisation Chart)

i)	Engineering Graduates.			
a)	Civil	60	5	36
b)	Electrical .. .. .	..	..	..
c)	Mechanical	1	4	4
ii)	Engineering Diploma Holders.			
a)	Civil	210	24	174
b)	Electrical .. .. .	..	..	..
c)	Mechanical	16	16	16
iii)	Scientists.	2	..	..
iv)	Ministerial staff	365	47	152
v)	Skilled personnel	35	31	40
vi)	Un-skilled personnel .. .. .	..	..	..
vii)	Others	151	28	92

Persons employed by the Contractors

i)	Engineering Graduates .. .. .	..	..	..
ii)	Engineering Diploma Holders .. .. .	..	..	..
iii)	Skilled personnel	8.20 Lacs.	2.60 Lacs.	19.36 Lacs.
iv)	Un-skilled personnel	34.20 Lacs.	11.40 Lacs.	91.20 Lacs.
v)	Others .. .. .	..	..	..

Note :—1) The record of persons employed by the contractors is not maintained. The figures have, however, been worked out on the basis of percentage of labour component of various schemes generally experienced in the posts, of various schemes generally experience in the post.

2) The figures shown for (b) above are in total Mandays.

Kashmir Division

Persons employed by the department (attach organisation chart).

—Engineering Graduates.

a)	Civil	48	16	..
b)	Electrical .. .. .	..	..	..
c)	Mechanical	23	..	..
ii)	Engineering Diploma Holders.			
a)	Civil	90	50	..
b)	Electrical .. .. .	..	..	..
c)	Mechanical	32	30	..
iii)	Scientists. .. .. .	..	..	4
iv)	Ministerial staff	172	..	12
v)	Skilled personnel	176	..	75
vi)	Un-skilled personnel .. .. .	..	..	12
vii)	Others .. .. .	..	..	30

Persons employed by the contractors.

i)	Engineering Graduates .. .. .	..	..	..
ii)	Engineering Diploma Holders .. .. .	..	..	1020445
iii)	Skilled personnel .. .. .	..	..	(Mandays)
iv)	Un-skilled personnel .. .. .	..	..	3665400
v)	Others .. .. .	..	..	..

ANNEXURE X

Departmentwise and Schemewise Outlay for the Major and Medium Irrigation Works during the 5th Plan (Rs. in lakhs)

Name of the Scheme	Total estimated cost	Anticipated exp. ending 4th Plan	5th Plan Outlay		
			Total	Capital	Foreign Exchange
1	2	3	4	5	6
JAMMU					
a) <i>Spill over works.</i>					
1. Tawi Lift Proect	550.00	374.83	175.17	175.17	..
2. Remodelling Ranbir Canal	180.00	92.28	88.18	88.18	..
3. Remodelling Pargoal Canal	40.60	22.57	18.03	18.03	..
4. Dudhar Canal	42.50	40.32	0.18	0.18	..
TOTAL (a)	18.10	530.00	281.56	281.56	..
b) <i>New Workes :</i>					
1. Ravi Canal	2984.00	..	1425.00	1425.00	..
2. Ranjan Lift	242.00	..	151.44	151.44	..
3. Rajal Canal	320.00	..	200.00	200.00	..
4. Other Schemes in Poonch and Rajouri Districts	1000.00	..	200.00	200.00	..
TOTAL (b)	4546.00	..	1976.44	1976.44	..
c) <i>Research</i> .. ..	..	..	8.00	..	..
d) <i>Investigation</i> .. ..	..	..	25.00	..	..
TOTAL JAMMU	5,359.10	530.00	2,291.00	2258.00	..
KASHMIR					
a) <i>Spill over workes :</i>					
1. Marval Lift	241.00	33.00	208.00	208.00	..
2. Lethapora Lift	98.00	21.75	76.25	76.25	..
3. Yusmarg Storage	42.55	15.10	27.45	27.45	..
4. Nik Karewa Storage	94.00	14.35	79.65	79.65	..
TOTAL (a)	475.55	84.20	391.35	391.35	..
b) <i>New works :</i>					
1. Banunulla irrigation project.. ..	87.76	..	73.65	73.65	..
2. Manulzora Irrigation Project	58.00	..	35.00	35.00	..
TOTAL (b)	145.76	..	108.65	108.65	..
Investigation and .. ..	..	..	17.00	..	..
Research .. ..	..	..	17.00	..	..
TOTAL KASHMIR	621.31	84.20	534.00	500.00	..
TOTAL JAMMU & KASHMIR	5980.41	614.20	2825.00	2758.00	..

ANNEXURE XI

Major and Medium Irrigation
Programmewise Summary of Outlays for 5th Plan

No.	Head/Sub-head/Programme	5th Plan approved Outlay (Rs. in Lakhs.)		
		Total	Capital	Foreign Exchange
1	2	3	4	5
1.	Irrigation (Major and Medium)			
	A. Major Projects			
	a) Spill over	175.17	175.17	..
	b) New	1625.00	1625.00	..
	TOTAL (A) (Major Projects)	1800.17	1800.17	..
	B. Medium Projects			
	a) Spill over	497.74	497.74	..
	b) New	460.09	460.09	..
	TOTAL (B) (Medium Projects)	957.83	957.83	..
	C. investigation and Research	67.00	..	..
	GRAND TOTAL A. B. C.	2825.00	2758.00	..

ANNEXURE XII

Major and Medium Irrigation Scheme wise Outlay

No.	Head/Sub-head/Scheme	Total estimated cost	Anticipated expenditure ending 4th Plan	5th Plan approved outlay (Rs. in lakhs)		
				Total	Capital	F. E.
	2	3	4	5	6	7
MAJOR AND MEDIUM IRRIGATION.						
Major Irrigation.						
<i>Spill over works.</i>						
a) Jammu.						
Tawi lift canal	550.00	374.83	175.17	175.17	..
b) Kashmir.
TOTAL (A)	..	550.00	374.83	175.17	175.17	..
<i>New Schemes.</i>						
a) Jammu.						
1. Ravi Canal	..	2984.00	..	1425.00	1425.00	..
2. Other Schemes in Poonch-Rajouri Distts.	..	1000.00	..	200.00	200.00	..
TOTAL (a)	..	3984.00	..	1625.00	1625.00	..
b) Kashmir.
TOTAL (B)	..	3984.00	..	1625.00	1625.00	..
TOTAL I. (Major Irrg.)	..	4534.00	374.83	1800.17	1800.17	..

1	2	3	4	5
II. Medium Irrigation.				
A. Spill over works.				
a) Jammu.				
1. Remodelling Ranbir Canal		180.46	92.28	88.18
2. Remodelling Pargal Canal		40.60	22.57	18.03
3. Dudar Canal		42.50	40.32	0.18
TOTAL (a)		263.56	155.17	106.39
b) Kashmir.				
1. Marvel Lift Project		241.00	33.00	208.00
2. Letpora Lift Project		98.00	21.75	76.25
3. Yousmarg Storage Project		42.55	15.10	27.45
4. Nivkaewa Storage Project		94.00	14.35	79.65
TOTAL (b)		475.55	84.20	391.35
TOTAL(A)		739.11	239.37	497.74
B. New Schemes.				
a) Jammu.				
1. Ranjan Lift Irri. Project		242.00	151.44	151.44
2. Rajal Canal		320.00	200.00	200.00
TOTAL (a)		562.00	351.44	351.44
b) Kashmir.				
1. Banimulla Irri. Project		87.76	73.65	73.65
2. Manual Zowra Irri. Project		58.00	35.00	35.00
TOTAL (b)		145.76	108.65	108.65
TOTAL(B)		707.76	460.09	460.09
TOTAL II (Medium Irrg.)		1446.87	239.37	957.83
III. Research.				
A. Jammu			8.00	
B. Kashmir			17.00	
TOTAL.III			25.00	
IV. Investigation.				
A. Jammu			25.00	
B. Kashmir			17.00	
TOTAL. IV			42.00	
GRAND TOTAL (I,II,III,IV)		5980.87	614.24	2825.00
				2758.00

Scheme wise Outlay for the 5th Plan

(Flood Control)

Head/Sub-Heads/ Schemes	Total estimated cost	Antici- pated Total expending 4th Plan.	5th Total	Plan Outlay)	Capital F.	E.
2	3	4	5	6	7	

KASHMIR DIVISION

Food-Control Works.

Anantnagh District.

Continuing Schemes.

Marginal Embankments.

Protection of Towns.

Protection around Town.	bund Anantnagh	22.00	10.08	12.00	12.00
-------------------------------	-------------------	-------	-------	-------	-------

Local Village Protection Works (Hyd. Division).	35.97	15.97	20.00	0.20
---	-------	-------	-------	------

TOTAL-II	55.97	26.05	32.00	32.00
----------	-------	-------	-------	-------

River Improvement Anti-Erosion Works.

Anti-erosion Works- Raising & Strengthen- ing of banks (Hy- draulic Division)	50.00	8.78	10.00	10.00
--	-------	------	-------	-------

River Training & Toe Protection Works (Hyd. Dn.)	90.00	63.17	10.00	10.00
--	-------	-------	-------	-------

Total-III	140.00	73.95	20.00	20.00, .
-----------	--------	-------	-------	----------

Drainage Improvements

Const of Flood Gates, Sluices & Spilways (Hydraulic Division.)	11.00	9.35	1.65	1.65	..
---	-------	------	------	------	----

TOTAL-IV	11.00	9.35	1.65	1.65	..
----------	-------	------	------	------	----

Extension of Water Ways

Total A-(i)-nantnagh Dist. (continuing Schemes.)	206.97	109.35	53.65	53.65
--	--------	--------	-------	-------

1	2	3	4	5	6	7
---	---	---	---	---	---	---

(ii) New Schemes

I. *Marginal Embankments*

1.	Lidder Basin	10.00	5.00	5.00
2.	Vothavathroo Basin	5.00	3.00	3.00
3.	Bringi Basin	5.00	3.00	3.00
4.	Aripath Basin	6.00	3.00	3.00
5.	Sandran Basin	8.00	4.00	4.00
6.	Arapal Basin	5.00	2.50	2.50
7.	Vishow Basin	10.00	5.00	5.00
8.	Kambiara Basin	8.00	4.00	4.00
9.	Romshi Basin	5.00	2.50	2.50

TOTAL-I	62.00	..	32.00	32.00	..
---------	-------	----	-------	-------	----

II. Protection of Towns

III. River improvement & Anti-Erosion Works:

Removal of Shbal in River Jhelum	15.00	..	3.00	3.00	..
-------------------------------------	-------	----	------	------	----

TOTAL-III	15.00	..	3.00	3.00	..
-----------	-------	----	------	------	----

IV. Drainage Improvements ..

V. Extension of Water Ways

Const. of Flood Absorption Basins A & B above Srinagar (Hydraulic Division)	50.00	..	1.00	1.00
--	-------	----	------	------

TOTAL-V.	50.00	..	1.00	1.00	..
----------	-------	----	------	------	----

VI. Tidal Protection Works

VII. Anti-Sea Erosion Works

Total (ii) New Schemes	127.00	..	96.00	36.00	.
------------------------	--------	----	-------	-------	---

TOTAL A (i)&(ii)	333.97	109.35	89.65	89.65	.
-----------------------------	---------------	---------------	--------------	--------------	----------

B. SRINAGAR DISTRICT.

(1) **Continuing Schemes.**

1. <i>Marginal Embankments:</i>				
Plantation	1.00	0.15	0.85	0.85

TOTAL-I	1.00	0.15	0.35	0.85	.
---------	------	------	------	------	---

II. Protection of Towns

1	2	3	4	5	6	7
III. River Embankments & Anti-Erosion Schemes.						
1. Anti-Erosion Works Charari-Sharief	9.00	5.55	3.45	3.45	..	..
2. Land Compensation	3.00	1.11	1.89	1.89	..	..
TOTAL- (III)	12.00	6.66	5.34	5.34	..	..
IV. Drainage Improvements						
V. Extension of Water Way.						
1. Doodganga Channel Diversion	67.95	22.48	33.47	33.47	..	..
2. Improvement to Flood Spill Channel	172.00	2.51	10.00	10.00	..	..
TOTAL-V.	239.95	24.99	43.47	43.47	..	..
VI. Tidal Protection works						
VII. Anti-Sea Erosion Works						
VIII. Survey & Invest. (P & D Divn)						
Total-B (i) (Continuing Schemes) Srinagar District	252.95	31.80	49.66	49.66	..	..
ii) New Schemes.						
1. Marginal Embankments.						
1. Gogaldara Basin	2.00	..	1.00	1.00	..	..
2. Sindh Basin	7.00	..	3.00	3.00	..	..
3. Dachigam Basin	7.00	..	3.00	3.00	..	..
4. Sukhnag Basin	1.70	..	1.00	1.00	..	..
5. Doodganga Basin	3.00	..	1.50	1.50	..	..
TOTAL-I	20.70	..	9.50	9.50	..	..
II. Protection of Towns						
III River improvement & Anti-Erosion Schemes:						
1. Const. of Barrage at Parimpora	250.00	..	12.00	12.00	..	..
2. Anti-Erosion Works Baba Khul & Bernina Khul Doodganga etc.	25.00	..	2.00	2.00	..	..
3. Const. of Masonry Ghats on River Jhelum	1.00	..	1.00	1.00	..	..
TOTAL-III	276.00	..	15.00	15.00	..	..

1	2	3	4	5	6	7
IV. Drainage Improvements						
V. Extension of Waterways						
VI. Tidal Protection works						
VII. Anti-Sea Erosion works						
VIII Investigation & Surveys (P & D Divn)						
1. Investigation of Dam Site.	5.00	..	3.00	3.00	..	..
2. Investigation of Barrages	5.00	..	3.00	3.00	..	..
3. Survey for preparation of Master Plan	1.00	..	0.50	0.50	..	..
4. Survey for Major lakes & Numbals	3.00	..	2.00	2.00	..	..
5. Survey for determination of land and Water Potential	5.00	..	3.00	3.00	..	..
6. Discharge Observations on River Jhelum & its tributaries.	12.00	..	7.00	7.00	..	..
7. Annual Survey for River Jhelum	1.25	..	0.75	0.75	..	..
8. Renovation of Gauge Huts	1.25	..	0.75	0.75	..	..
9. Improvements to Silt Laboratory & setting up of Rain & Snow Gauge Stations	8.00	..	4.00	4.00	..	..
10. Fixing of Well type Gauges	2.00	..	1.00	1.00	..	..
11. Fixing of Grandle & Winch arrangements at discharge sides	2.00	..	1.00	1.00	..	..
12. Purchase of current Meter & other equipments	1.00	..	1.00	1.00	..	..
TOTAL-VIII	46.50	..	27.00	27.00	..	..
Total B (ii) New Schemes Sgr. District.	343.20	..	51.50	51.50	..	..
TOTAL B (a II)	596.15	31.80	101.16	101.16	..	..

C-BARAMULLA DISTRICT.**(I) Continuing Schemes.****1 Marginal Embankments**

1. Kahmil Basin	1.27	0.53	0.74	0.74	..	..
2. Vij & Hamal Basin	4.30	1.00	3.30	3.30	..	..
3. Farkin Basin	3.50	1.46	2.00	2.00	..	..
4. Qazinagh Basin.	0.77	0.02	0.75	0.75	..	..
TOTAL--	9.84	3.01	6.80	6.80	..	..

	2	3	4	5	6	7
I. Protection of Towns. ..	..	..	..	..	..	..
II. River Impvts. & Anti-Erosion Schemes ..	..	..	..	..	..	..
III. Drainage Improvements.						
Improvements to Outfall Channel	2200.00	1018.44	300.00	300.00	..	..
TOTAL-IV.	2200.00	1018.44	300.00	300.00	..	..

V. Extension of Water Ways	..	..	..	..	..	..
VI. Tidal Protection Works	..	..	..	..	..	..
VII. Anti-Sea Erosion Works	..	..	..	..	..	..
Total C-(I) Continuing Schemes (Baramulla Distt.)	2209.84	1028.44	306.80	306.80	..	..

1) New Schemes

Marginal Embankments.						
Phoru Basin	30.00	..	10.00	10.00	..	..
Kamil Basin	20.00	..	10.00	10.00	..	..
Hamal Basin	10.00	..	5.00	5.00	..	..
Vij Basin	7.00	..	3.50	3.50	..	..
Ningli Basin	3.00	..	1.50	1.50	..	..
Krishanganga Basin	8.00	..	4.00	4.00	..	..
Madmati Basin	1.00	..	1.00	1.00	..	..
Arin Basin	2.00	..	1.00	1.00	..	..
TOTAL-I.	81.00	..	36.00	36.00	..	..

II. Protection of Towns	..	..	..	..	..	..
III. River Impvts. & Anti-Erosion Works	..	..	..	..	..	..
IV. Drainage Improvements.						
Land Reclamation of Mirgund Jheel by Ferozpora Nallah	25.00	..	5.00	5.00	..	..
TOTAL-IV.	25.00	..	5.00	5.00	..	..
V. Extension of Water-ways	..	..	..	..	..	..
VI. Tidal Protection Workk	..	..	..	..	..	..

	1	2	3	4	5	6	7
VII. Anti-Sea Erosion (Sonawari Block)							
1. R & W of 3rd Line of Embankment	10.00	..	5.00	5.00	..	..	..
2. Back Water bunds on River Jhelum from Sumbal	20.00	..	6.00	6.00	..	..	..
3. -do- from Shal-teng to Sumbal	15.00	..	5.00	5.00	..	..	..
4. Const. of bunds at different spots in Sonawari	26.00	..	5.00	5.00	..	..	..
5. R & W of Daji & Malikhan Bund	3.00	..	1.04	1.04	..	..	..
6. Extension of Dry Stone pitching Wattal Haji to Ali Chak	5.00	..	3.00	3.00	..	..	..
TOTAL-VII.	79.00	..	25.04	25.04	..	..	..
Total. C(ii) New Schemes:-	185.00	..	69.04	66.04	..	..	..

Flood Protection Works in Border Area,

1. F. P. Work on Tad Darohi Nallah in Teetwal Area	3.00	..	1.00	1.00	..	..	..
2. P. W. Batapora Moni-Ghat Uri	1.00	..	1.00	1.00	..	..	..
3. P. W. Nambla Nallah in Uri Area	1.00	..	1.00	1.00	..	..	..
4. P. W. Badwan in Gurez Area	1.35	..	1.35	1.35	..	..	..
TOTAL	6.35	..	4.35	4.35	..	..	..
Grand Total F. P. Works Baramulla District	2401.19	1023.44	377.19	377.19	..	..	..
Total Kashmir	3331.35	2069.59	568.00	568.00	..	..	..

JAMMU.

I Jhelum Basin. DIVISION
(i) Spill over Schemes.

1. Protection work from Kalai to Poonch on R & L Bank of Poonch River	7.40	5.40	2.00	2.00	..	..	..
2. P. W. Bettar Nallah Poonch	4.54	3.26	1.28	1.28	..	..	..
3. P. W. Mehdhar Nallah Surankote	4.00	1.58	1.42	1.42	..	..	..
4. P. W. Mandi to Kalai Bridge	2.00	1.25	0.75	0.75	..	..	..
TOTAL. (i)	17.94	11.49	5.45	5.45	..	..	..

1	2	3	4	5	6	7
(ii) New Schemes						
1. P. W. Suran River	20.50	..	10.00	10.00	..	..
2. P. W. Mandi Nallah	7.50	..	7.50	7.50	..	..
3. P. W. Mandhar Nallahfi	4.00	..	4.00	4.00	..	..
4. P. W. Other small Nallah	2.00	..	2.00	2.00	..	..
TOTAL (ii)	34.00	..	23.50	23.50	..	..
GRAND TOTAL (i&ii)	51.94	11.49	28.95	28.95	..	..

II. Chenab Basin.

(i) Spill over Schemes.

1. P/W alongwith Waddi Tawi & Nikki Tawi consisting of spurs and Embankments for prot. to Village Channi Mukwal etc.	12.76	5.13	3.63	3.63	..	..
2. Const. of closure bunds with spurs for left bank of Ranbir Cannal to Village Waddi Nikki Tawi	3.55	0.55	3.00	3.00	..	..
3. Construction of curve short circuit for a shoe curve	9.00	2.13	3.18	3.18	..	..
4. P. W. Sajwal and Gurah-Manhasari	4.50	2.00	2.50	2.50	..	..
5. Other individual protection work on Chenab	11.17	8.17	3.00	3.00	..	..
6. P. W. Darhal to Rajouri.	3.00	1.88	0.80	0.80	..	..
7. P. W. Jamalo Tawi	1.00	0.77	0.23	0.23	..	..
8. P. W. Thana Mandi to Rajouri.	4.47	1.30	3.00	3.00	..	..
9. Lohaki Prot. Bund.	9.67	7.14	2.50	2.50	..	..
10. P. W. Planwalla Khad Chanalization upto Tawi	5.00	1.80	3.20	3.20	..	..
11. Construction of 150 ft. long spur closure bund for protection of Kanachak :	2.75	1.75	1.00	1.00	..	..
12. P. W. Rajouri to Nowashera	2.50	1.56	0.94	0.94	..	..
13. P. W. Palkhoo Nallah	2.00	0.20	1.80	1.80	..	..

1	2	3	4	5	6	7
14. P. W. Kherian L/S Bahlole Nallah	1.00	0.82	0.18	0.18	..	..
15. P. W. Gadi Garh Bahlole Nallah	1.83	1.53	0.30	0.30	..	..
16. P. W. Chak Kirpal-pora river Chenab	1.38	0.38	1.00	1.00	..	..
17. P. W. Channi Himat	1.05	0.53	0.52	0.52	..	..
18. P. W. Bishlari Nallah Banihal	4.50	3.50	1.00	1.00	..	..
19. P. W. Aanhji Nallah (Sukhetar)	2.25	0.50	1.75	1.75	..	..
20. P. W. Agerballian Nallah	2.00	0.75	1.25	1.25	..	..
TOTAL (i)	85.38	42.59	34.78	34.78	..	..

(ii) New Schemes

1. P. W. Rajouri Town	17.00	..	10.00	10.00	..	..
2. P. W. Rajouri Tawi	12.00	..	8.00	8.00	..	..
3. P. W. Kandi Budhal	7.50	..	6.00	6.00	..	..
4. P. W. River Chenab Jammu Distt.	55.00	..	4.00	4.00	..	..
5. P. W. Nowshera Tawi	6.00	..	3.00	3.00	..	..
6. P. W. River Waddi and Nikki Tawi Khana Chak area etc.	28.00	..	5.00	5.00	..	..
7. P. W. Bahlole Nallah	15.00	..	4.00	4.00	..	..
8. P. W. Aik Nallah	9.00	..	4.00	4.00	..	..
9. P. W. other smaller Nallah in Jammu Tehsil & other Indul. Prot. Works in Jammu	18.00	..	4.00	4.00	..	..
10. Channalization of Planwall Nallah	5.00	..	3.00	3.00	..	..
11. P. W. Lohakhi Nallah	4.00	..	2.00	2.00	..	..
12. Channalization of Panjtoot Khad	10.00	..	2.00	2.00	..	..
13. P. W. near Chak Shabloo Munawar Tawi	6.00	..	2.00	2.00	..	..
14. P. W. Malal Nallah	5.00	..	3.00	3.00	..	..
15. P. W. Kothar Nallah	4.00	..	2.00	2.00	..	..

2	3	4	5	6	7	1	2	3	4	5	6	7
Other individual protection work of small Nallahs in Tehsil Akhnoor	8.00	..	3.00	3.00	..	3. P/W R & B Ujh River I/S National Highway Bridge & D/S National Highway	24.37	19.37	8.50	8.50	..	
P. W. Rehari Nallah, Jammu city	12.00	..	12.00	12.00	..	4. Other individual Protection works of Ravi Basin	18.88	5.90	2.75	2.75	..	
P. W. Aripinchalla	1.00	..	1.00	1.00	..	5. P/W Dudwara Billa-war	1.31	1.11	0.20	0.20	..	
P. W. Karole	1.50	..	1.50	1.50	..	6. (a) P/W Khakhyal in Kathua Town						
P. W. Bankote	2.00	..	2.00	2.00	..	b) P/W Nagri Wajoo						
P. W. on tributaries Bishleri Nallah.	8.00	..	3.50	3.50	..	c) P/W Budohli	2.39	2.12	0.27	0.27	..	
P. W. Bhalla	1.00	..	1.00	1.00	..	d) P/W Swaran Chak (Kathua)Khad						
P. W. Gowari	1.50	..	1.50	1.50	..	e) P/W Kharar						
P. W. Deggi	1.00	..	1.00	1.00	..							
P. W. Khoi	6.00	..	3.00	3.00	..	TOTAL (i)	65.30	39.05	13.72	13.72	..	
P. W. Dudevara	1.00	..	1.00	1.00	..	II) New Schemes						
P. W. Bhandal	0.50	..	0.50	0.50	..	1. P W right bank Ujh river D/S National highway phase-III Kod Purnu	25.00	..	3.00	3.00	..	
P. W. Marhi khad near Pouni	3.50	..	3.50	3.50	..	2. P/W Left bank U/S Dhar Udhampur road phase-II	3.00	..	2.00	2.00	..	
P. W. Barakh Reasi	0.60	..	0.60	0.60	..	3. P/W R/B D/S National Highway international Border	22.00	—	3.00	3.00	..	
P. W. Barola Reasi	0.80	..	0.80	0.80	..	4. P/W Tarnah Nallah R/L bank in tehsil Hiranagar between Ujh canal xing & old Samba Kathua road incld Nadial extension etc.	12.80	..	3.00	3.00	..	
P. W. for Marhi Village near Reasi	0.80	..	0.80	0.80	..	5. P/W Tarnah nallah left bank Village Mandialla	4.00	..	3.00	3.00	..	
P. W. Samoli	0.75	..	0.75	0.75	..	6. P/W D/S old Samba Kathua Road	21.94	..	3.00	3.00	..	
P. W. Mansa Davi-Ramnagar Khad	0.30	..	0.30	0.30	..	7. Extension of left side P/W from Saiwan to Phulpur Confluence of Devak and Basantar	18.11	..	3.00	3.00	..	
P. W. Jakhar Udh. District	1.20	..	1.20	1.20	..	8. P/W Basantar River D/S National Highway						
P. W. Dibber „	1.00	..	1.00	1.00	..	a) Extension R/S P/W from Tanda to Phuplur	19.98	..	3.00	3.00	..	
P. W. Panssa „	1.50	..	1.50	1.50	..	b) Extension R/S P/W from Kamour to Rangoor	12.00	..	3.00	3.00	..	
P. W. Talwara „	2.00	..	2.00	2.00	..							
TOTAL (ii)	243.25	..	105.45	105.45	..							
GRAND TOTAL-II (i+ii)	328.63	42.59	140.23	140.23	..							
Ravi Basin												
Spill over Schemes												
Construction of embankment & Spurs on left bank of Ujh River	8.55	5.25	1.00	1.00	..							
P/W Basantar River D/S National Highway	4.30	3.30	1.00	1.00	..							

1	2	3	4	5	6	7	1	2	3	4	5	6	7
9.	P. W. Tillo Billawar.	2.00	..	2.00	2.00	..	20.	P. W. Ghati	0.30	..	0.30	0.30	..
10.	P. W. R/Bark Garud.	2.00	..	2.00	2.00	..	21.	P/W Billawar Nallah and other nallahs and khuds.	2.00	..	2.00	2.00	..
11.	Supurs on R/B/ D/S old Samba Kathua Road.	1.00	..	1.00	1.00	..	22.	P/W on river and local nallahs and khads in Hiranagar tehsil	5.00	..	1.60	1.60	..
12.	P.W. Banilad.	6.00	..	1.00	2.00	..	23.	P/W on rivers and nallahs and local khads in Samba tehsil.	2.00	..	2.00	2.00	..
13.	P. W. Beril Island.	8.00	..	1.00	2.00	..	24.	Protection work Local nallaha and khad in Kathua tehsil.	3.00	..	2.20	2.20	..
14.	Channelization of Kathua khad D/S road bridge Kathua to village Khakhiyal.	12.00	..	3.00	3.00	..	TOTAL (ii)						189.03 .. 48.90 48.90 ..
15.	P/W Sahar Khad D/S National highway to Khakhiyal Villg.	10.00	..	2.00	2.00	..	GRAND TOTAL III (i+ii)						254.33 39.05 62.62 62.62 ..
16.	P.W. Badala	2.00	..	1.00	2.00	..	GRAND TOAL Flood Works Jammu (I+II+III)						634.90 92.93 232.00 232.00 ..
17.	P. W. Changran.	2.00	..	1.00	2.00	..	GRAND TOTAL Jammu and Kashmir						3966.25 2152.52 800.00 800.00 ..
18.	P. W. Dhaloo (Billawar)	0.30	..	0.30	0.30	..							
19.	P. W. Khajourah	0.50	..	0.50	0.50	..							

3. Power

The installed capacity in the state at the time of Independence was 6.5 MWs and it continued to be so upto 1954-55. In 1955-56, the first hydro electric project after Independence was commissioned at Ganderbal with installed capacity of 6 MWs. Except for marginal increase in production as a result of commissioning of small hydel and diesel projects, the installed capacity remained at 12 MWs till 1959-60. The installed capacity at the end of each plan is given below :—

1955-56 (End of 1st Plan)	... 12.23 MWs
1960-61 (End of 2nd Plan)	... 20.76 "
1965-66 (End of 3rd Plan)	... 27.58 ..
1968-69	... 40.36 ..
1973-74 (End of 4th Plan)	... 83.00 ..

The break up of the installed capacity at the end of the 4th plan is as under :—

Ganderbal (hydel)	15.00 MWs
Mohara (hydel)	9.00 "
Bemina (Diesel)	5.00 "
Sumbal (hydel)	11.30 "
Chenani (hydel)	15.00 "
Kalakote (Thermal)	22.50 "
Other Diesel	2.30 "
Other Small Hydels	2.90 "
Total	83.00 MWs

(In addition, P.S.E.B. Purchases Account for 12.5 MWs.)

2. The outlay on power sector during the Fourth Five year Plan is more than 70% of the amount spent during the first 3 Five Year Plans and the Annual Plans (1966-69). The major Power stations commissioned during the 4th Plan are Chenani Hydel Project (15 MWS), and the 2nd and 3rd units of Kolakote Thermal Station (15.0 MWS) and the 1st unit of Sumbal Power House of Upper Sindh Hydel project (11.3 MWS). The Kashmir Valley however continues to be plagued with Power shortages and un-satisfactory supply conditions. The suppressed load in the Valley is now over 20 MWS. Work on Lower Jhelum Hydel project (3 X 35 MWs) is in progress and it is expected to be commissioned before the end of the Fifth Plan. Work on Satakana project in Ladakh is also in progress.

The major high voltage transmission lines to be taken up during the 4th Five Year Plan were the Srinagar Udhampur 132KV D/C Transmission Line, Udhampur-Pathankot 220 KV S/C Transmission line and the Sumbal-Srinagar 132KV S/C Transmission Line. Sumbal-Srinagar line has been commissioned. The other two lines are expected to be ready early in the first year of the 5th 5 year Plan, thereby linking the Valley grid with that of the Northern Region and making possible the bulk transfer of power from the Central generating stations to meet the growing requirements of the Kashmir Valley till the Uri Hydel project is commissioned. Necessary sub-transmission works like

construction of receiving stations, laying of 33 KV lines etc. were completed for the additional power generated during the period.

On the rural electrification, front, the achievement both physical and financial are likely to surpass the targets fixed at the beginning of the 4th Plan. Against the target of 160 villages 623 villages are expected to be electrified before the end of the 4th Plan i.e. about 22% of the total villages. With the formation of the State Electricity Board, it has been possible to obtain loans from Rural Electrification Corporation. During 1972-73, the Corporation sanctioned loans for 6 schemes and another 24 schemes are expected to be sanctioned before the end of the 4th Five Year Plan.

The State Government propose to achieve 90% Electrification in the 5th Five Year Plan. It is anticipated that loans would be available for another 24 schemes during the year 1973-74. The first instalment of all schemes is estimated at Rs. 3 crores. The total cost of Rural electrification which will be financed from Rural electrification Corporation has been estimated at roughly Rs. 18 crores of which Rs. 3 crores is expected to be spent during the last year of the 4th Five Year Plan. An average expenditure of Rs. 50,000/- per village has ben calculated.

The schemes financed by the Rural Electrification Corporation in the State qualify according to the norms applicable to the ordinary backward or specially underdeveloped area. Financial returns postulated for the categories, ordinary backward and specially under-developed areas are as under:—

(i) Ordinary backward	5 % upto 5th year
	5½% upto 10th year
	6 % upto 15th year
(ii) Specially under developed	4 % upto 10th year
	5 % upto 15th year
	5½ % upto 20th year

The demand and availability of Power during the 5th and 6th Five Year Plans have been worked out and it is found that the gap will go on widening rapidly till the end of the 5th Plan and then gradually narrow down. In order to meet the growing requirements of power, it is essential that the hydel potential of the State is investigated and project reports prepared so that a shelf of reports would be available for selection and implementation. Keeping this in view, two investigation Circles and Four Design Circles have been created in the State. A separate agency has been created for investigation works in the Ladakh District. This would incidently enable the development of necessary design expertise within the State. Before the end of the 4th Five Year Plan, the detailed project report of Uri Hydel Scheme (660 MWs) is expected to be available.

The completion of the civil works of Chenani and Upper Sindh Hydel projects and the accelerated tempo of works in Lower Jhelum Hydel project have given necessary confidence to the Engineers of the State totake up construction of major hydel projects. The Uri hydel project may be executed by the State Government. Simultaneously, the State may also execute the Dul-Hasti Hydel project. Both these projects are expected to be taken up as Central Generating Schemes.

Ladakh, Kashmir Valley and higher reaches of Jammu province have, in fact, a one season economy. In winter all productive activities come to stand-still with the result that per capita income and per capita production per annum is low. This climatic constraint can be overcome effectively by the introduction of Central Heating in all productive sectors of the economy.

Central heating can be introduced with profit in factories, community centres, panchayat halls, restaurants, luxury house boats, tourist centres, clubs opera-

ion theatres and special wards of hospitals, laboratories libraries, office buildings, cinema halls, hotels and other community institutions where air conditioning would result in the better utilisation of the premises and for cultivation of commercial crops like Mushrooms.

The State continues to be deficit in food. This handicap can be overcome by bringing additional areas under irrigation. The physiography of the State is such that the entire agricultural areas cannot be brought under flow irrigation nor can it be given the benefits of 100% coverage through lift irrigation as the lifts would be very large. Karewa areas of the Valley and other uplands in Jammu region can be brought under lift-irrigation. For this again power would be necessary.

The per capita consumption of electricity in the State is low as compared to the All India Average. The consumption per capita was only 3.94 units in 1947 and will be about 42 units in 1972-73. It is anticipated that this will rise to 66 units in 1973-74.

If the consumption of urban centres of Srinagar and Jammu and other towns is excluded from the above, the per capita consumption in rural areas will be tragically insignificant. The liberal assessment of consumption in rural areas would not place it at more than 3650000 KWH. This gives a per capita consumption of only 1.11 units. There is, thus need for giving urgent attention to the requirements of rural areas in particular and of the needs of power for such sections of the people as have a direct bearing on developing the economy of the State. The power sector has, therefore, been given a higher priority to bring about a marked improvement in the earning capacity of the people of our State.

A study has been undertaken to assess the power demand at the end of 5th Five Year Plan to enable a proper formulation

of further power generation schemes. The requirements of power at the end of 5th Five Year Plan for various sectors of the economy have been worked out as under:-

(a) Irrigation (Lift irrigation and Tube wells)

(i) Jammu	48 MWS
(ii) Kashmir	320 „

(b) Animal Husbandry

(i) Equipment	10 MWS
(ii) Air conditioning 10 lac Cft. @ 5KW/1000 Cft.	0.5 MW
Total	10.5 MWS

(c) Agriculture Department

(i) Pumps and Hot Houses	53.00 MWS
(ii) Cold Storages and Shellers	1.0 MWS
Total	54.0 MWS

(d) Horticulture Planning and Marketing

(i) Mushroom Canning	200 KWs
(ii) Mushroom Growing 120 units 225 Sq. ft. x 10 ft. = 2.7 lacs cft. at 0.5 KW/1000 Cft.	135 KWs
(iii) Quick freezing units	100 KWs
(iv) Apple processing units capacity 30,000 tonnes/year	10,000 KWs
(v) Grading centres	1,200 KWs
(vi) Cold Storages	400 KWs
Total	12,035 KWs i.e. 12 MWs

(e) Central heating

135.0 MWs

(f) Industries

(iv) Peak demand 1978-79
i. e. end of Vth Five
Year Plan

640 MWs

Projecting this further on the basis of anticipated rates of annual growth the demand year-wise ending 1991-92 would be of the following order :—

	Total	Year	Annual Growth rate	Annual increase	Total MWs
(i) Large and Medium (Public Sector)	94.0 MWs	1978-79	—	—	640
(ii) Small Scale (Private Sector)	52.0 MWs	1979-80	16	102	742
(iii) Industrial Development Corp.	10.00 MWs	1980-81	16	119	861
		1981-82	15	129	990
		1982-83	14	139	1129
		1983-84	14	158	1287
		1984-85	13	167	1454
		1985-86	13	189	1643
		1986-87	12	197	1840
		1987-88	11	202	2042
		1988-89	10	204	2246
		1989-90	10	225	2471
		1990-91	10	247	2718
		1191-92	9.5	258	2976
(g) Total additional Demand Diversity Factor 1.5					
(i) Estimated additional peak demand	484 MWs				
(ii) Anticipated peak demand 1973-74 as per plan discussions held in Delhi on 4-2-1973	97 MWs				
(iii) Applying growth rate of 10% on existing demand to cover domestic commercial, other bulk, consumers like Defence 97 MWs will rise by end of Vth Plan i. e. by 1978-79 to	156 MWs				

5—Projects under construction

The following projects are in hand :

5. 1. Uper Sindh Hydel Project.

a) Location	..	Sumbal, District Srinagar 48 Kms Srinaagar Leh road.
b) Features	..	i) Rockfill diversion weir 58 Mrs (190 Ft. long) ii) Lined channel 11 kms length iii) Tunnel 0.5 Kms. length
c) Installed capacity	..	22.6 MWs (2 units of 11.3 MWs)
d) Area benefitted	..	Jammu and Kashmir State
e) Progress	..	Date of start 1965-66
f) Date of completion	..	Unit I 1973-74 Unit II 1974-75

5.2. *Chenani Hydel Project (Extension)*
Extension by 2 units of 5 MWs each.

Progress ..

Civil works completed
 date of completion 1974-75.

5.3. *Lower Jhelum Hydel Project*

a) Location ..

Sainpur, Distt. Baramulla 72 Kms on Srinagar-Uri Road

b) Features ..

i) Concrete barrage 118 metres (390 ft. in length)

ii) Lined channel, 10 Kms. long

c) Installed capacity ..

105 MWs (3 units of 35 MWs each)

d) Area benefited ..

Jammu and Kashmir State

e) Progress ..

Date of start 1963-64

Date of completion :

Ist unit (anticipated) 1976-77

5.4. *Salal Hydel Project (under Central Generation Schemes)*

a) Location ..

Dhyangarh, Distt. Udhampur

b) Features ..

Earth core rockfill dam, 113, metre (370 Ft.) high across river Chenab.

c) Installed capacity (Stage I) ..

345 MWs (3 units of 115 MWs each)

d) Area benefited ..

Jammu and Kashmir State and Northern Region.

e) Progress —

Date of Start 1969

Date of completion 1978-79

5.5. *Stakna Hydel Project*

a) Location ..

Stakna, District Ladakh.

b) Features ..

concrete weir/lined open channel 6.0 Kms. in length.

c) Installed capacity ..

7.5 MWs (3 units of 2.5 MWs each)

d) Area benefited ..

District Ladakh.

e) Progress ..

Date of start 1969-70

Date of completion 1977-78

6. *Projects Ready for pre-construction*

The following two Projects have been accepted in principle by the Planning commission to be undertaken for pre-construction works immediately;

6. 1. *Dul-Hasti Hydel Project: (Kishtwar Stage I)*

- | | |
|-----------------------|---|
| a) Location | .. Dul near Kishtwar Distt. Doda |
| b) Features | .. The project involves construction of 55 metres high concrete dam across the Chenab. |
| c) Installed capacity | .. 330 MWs (3 units of 110 MWs each) |
| d) Area benefited | .. Jammu and Kashmir & Northern Region |
| e) Progress | .. Proposed to be taken up for construction in 5th Plan under Central Generation Schemes. |

6. 2. *Uri Hydel Project*

- | | |
|---|---|
| a) Location | .. Lagama Distt. Baramulla |
| b) Features | .. i) Project involves construction of 100 metres long Barrage at village Buniyear across river Jhelum. |
| | .. ii) Length of tunnel — 11 Kms |
| | .. iii) Length of open channel 0.75 Kms. |
| c) Installed capacity Stage I (ultimate installed capacity 660 MWs) | 330 MWs . (3 units of 110 MWs each) |
| d) Area benefited | .. Jammu and Kashmir State |
| e) Progress | .. Proposed to be taken up for construction during 5th Plan under Central Generation Schemes. |

7. *Projects under investigation.*

In addition to the above, the following schemes are under investigation. The project report and feasibility of these schemes will be available after the detailed investigations and studies in hand are completed :

7. 1. *Sonamarg Hydel Scheme*

- | | |
|-----------------------|---|
| a) Location. | .. Sonamarg, Distt. Srinagar.
86 Kms on Srinagar-Leh road |
| b) Features | .. i) 100 metre (328 Ft.) high rockfill dam across river Sindh (Tributary of river Jhelum) |
| | .. ii) Tunnel 10 KMs. |
| c) Installed capacity | .. 180 MWs (two units of 90 MWs each) |
| d) Area benefited | .. Jammu and Kashmir State |

7. 2. *Gangabal Hydel Scheme*

- | | |
|-----------------------|--|
| a) Location | — The project is located at Gangabal on Wangat Nallah a tributary of river Jhelum disst. Srinagar. |
| b) Features | .. i) 2 dams 30 metres high at the outlet of gangabal lake. |
| | .. ii) Length of tunnel 7 Kms. |
| c) Installed capacity | — 100 MWs |
| d) Area benefited | — Jammu and Kashmir State |

1. 3 Upper Sindh Hydel Project Stage II

- a) Location .. Kangan, District Srinagar 39 Kms.
- b) Features .. Srinagar-Leh road.
- .. i) Concrete weirs across river Sindh and Wangat Nallah.
- .. ii) 17 Kms open Channel along river Sindh and 7 Kms. open channel along Wangat Nallah.
- c) Installed capacity .. 100 MWs
- d) Area benefited .. Jammu and Kashmir State.

7 4. Lidder Hydel Scheme (Stage I, II, III and IV)

- a) Location and features — The project involves construction of a 30 metres high dam at Sheshnag across Lidder a tributary of river Jhelum and a series of weirs down stream.

- b) Installed capacity ..
- Stage I (Sheshnag Chandanwari.) — 60.0 Mws
- Stage II (Chandanwari-Phalgam) .. 60.00 "
- Stage III (Phalgam-Aishmuqom) .. 70.0 "
- Stage IV (Matan) — 12.0 Mws

Total:—202 Mws

- c) Area benefitted .. Jammu and Kashmir State.

7.5. Other schemes on the Jhelum viz Kishengunga Vishew etc.

- a) Location .. Kashmir Valley
- b) Benefite .. Installed capacity expected to be 750 MWs.
- c) Area benefited .. Jammu and Kashmir State

7.6 Other Schemes on the Chenab

7.6.1 Nagar Dam Hydel Project

- a) Location .. Near Kashtwar, Distt. Doda
- b) Benefits .. Installed capacity 350 Mws.
- c) Area benefited — Jammu and Kashmir State.

7.6.2 Pakal Dul Hydel scheme (Kashtwar stage II)

- a) Location .. District Doda
- b) Benefites .. Installed capacity 65 Mws
- c) Area benefited .. Jammu and Kashmir State.

7.6.3 Rattle Hydel Scheme

- a) Location .. District Doda
- b) Benefits .. Installed capacity 140 Mws
- c) Area benefited .. Jammu and Kashmir State

7.6.4. Baqliar Hydel Scheme

- a) Location .. District Doda
- b) Benefits .. Installed capacity 400 Mws
- c) Area benefited .. Jammu and Kashmir State.

7.6.5 Sawalkot Hydel Scheme

- | | |
|-------------------|-------------------------------|
| a) Location | .. District Udhampur |
| b) Benefits | .. Installed capacity 400 Mws |
| c) Area benefited | .. Jammu and Kashmir State. |

7.7. Schemes in Ladakh

7.7.1. Drass Hydel Scheme

- | | |
|-----------------------|----------------------------------|
| a) Location | .. Near Drass in Ladakh District |
| b) Installed capacity | .. 3 Mws |
| c) Area benefited | .. Ladakh |

7.7.2. Suru Hydel Scheme

- | | |
|-----------------------|---|
| a) Location | .. On river Suru near Kargil Distt. Ladakh. |
| b) Installed capacity | .. 9.6 MW |
| c) Area benefited | .. Ladakh. |

7.7.3. Leh Hydel Scheme

- | | |
|-----------------------|------------------------------------|
| a) location | .. On river Indus near Leh. Distt. |
| b) Installed capacity | .. 12.5 MWS |
| c) Area benefited | .. Ladakh. |

7.7.4. Karu Hydel Scheme

- | | |
|-----------------------|---|
| a) Location | On river Indus near Upshi
Distt. Ladakh. |
| b) Installed capacity | 7.5 Mws |
| c) Area benefited | Ladakh |

7.7.5 Gaik Hydel Scheme

- | | |
|-----------------------|-----------------------------|
| a) Location | .. Near Gaik in Distt. Leh. |
| b) Installed capacity | .. 7.0 Mws |
| c) Area benefited | .. Ladakh |

7.7.6 Tangste Hydel Scheme

- | | |
|-----------------------|---|
| a) Location | .. Near village Tangste Distt.
Ladakh on river Shyok |
| b) Installed capacity | .. 3.0 Mws |
| c) Area benefited | .. Ladakh. |

Financial outlays

The following table indicates the progressive increase in outlays on power development both in terms of total outlay and the percentage of expenditure on power to the

total plan outlay:-

Plan/year	Total plan year Exp.	%age increase over previous plan	Power year	plan Exp.	%age increase over previous year	Rs. in lakhs power outlays as percentage of total outlay.
Ist plan	1151.71			272.82	..	17.16
IInd plan	2594.75	12%		353.84	30%	13.6
3rd plan	6185.00	138%		906.50	157%	14.6
1966-67	1692.24	..		467.25	..	27.8
1967-68	2043.03	..		515.25	..	25.2
1968-69	2293.26	..		575.48	..	25.0
4th plan (as original estimate)	15840.00	156%		4009.00	344%	25.3
As per recent re-appraisal	117694.52	185%		5041.00	545%	28.5

The original 4th Plan outlay on power was Rs. 40.09 crores it anticipated that the expenditure will be of the order of Rs. 51.52 crores by the end of the Fourth Plan. There has been a steady increase in the total outlay on power both in respect of outlay and the %age of the power outlay to the total outlay.

9. Proposals for 5th Plan.

9.1 Generation.

The major power scheme is the Uri Hydel Project with an installed capacity of 660 MWs. of which 330 MWs will be installed in the first stage. The total estimated cost of the project is placed at Rs. 142 crores. This is expected to be taken as a Central Scheme and as such allocation has been made for advance action only. In addition to this, the following schemes have been proposed in the 5th Five Year Plan :—

(a) On going Schemes

- (i) Chenani Hydel Project
- (ii) Upper Sindh Hydel Project
- (iii) Lower Jehlum Hydel Project
- (iv) Stakna Hydel Project (as part of Ladakh sector)

(b) New Schemes

- (i) Lidder Hydel Project Chandanwari-Pahalgam)
- (ii) Sonamarg Dam Project.
- (iii) Gangabal Storage Project
- (iv) Micro Hydel Schemes (Planning Commission has already approved of Karnah Hydel Scheme).

The proposed outlay on these projects is indicated in the attached statement which sets out the financial outlays in each project.

9.2 Transmission lines

To ensure the evacuation of power which will be available after implementation of the scheme included in the Plan proposals it will be necessary to undertake the construction of the following transmission lines and the sub-stations:—

- (i) Uri-Pampore 220 KV DC Transmission Lines
- (ii) Kishtwar - Batote - Udhampur 220 KV DC Tr. lines (For evacuation of power from Kishtwar which is being

undertaken in the Central Sector during the 5th Five Year Plan)

- (iii) Batote-Bemina 220 KV DC Tr. line
- (iv) Grid stations at Udhampur, Pampore, Smargarh, Anantnag, Bemina and Kathua.
- (v) Augmentation Grid stations at Janipur, Bemina.

The financial outlays on this account are indicated in the attached statement.

9.3 Sub-trans Lines

The sub-transmission system will have to be augmented for distribution of power which will become available. The additional power i.e. estimated to be available

by the end of the Fifth Five Year Plan will be as under :—

- (1) Lower Jhelum Hydel project 105 MWS
- (2) Upper Sindh Hydel Project to which the sub. transmission system is yet to be laid 22.6 MWS
- (3) Augmentation Chenani Hydel Project 10 MWS
- (4) Uri-Hydel project though nothing will be on steam in the Fifth Five year Plan the sub-transmission system has to be laid in advance for distribution of power on the commissioning of the first unit of 110 MWS in 1979-80.

SCHEMEWISE OUTLAYS FOR POWER PROJECTS

S. No.	Development/Head/Sub-Head	5th Plan Total	Approved Capital	Outlay Foreign Exchange
1.	2.	3.	4.	5.
A—Generation				
1.	Chenani Hydel Project.	55.36	55.36	..
2.	Upper Sindh Hydel Project.	126.35	126.35	..
3.	Lower Jhelum Hydel Project.	3138.88	3138.88	..
4.	Kalakote Thermal Project.	..	..	..
5.	Diesel Station Bemina.	2.16	2.16	..
6.	Advance Action (New Generation)			
	(i) Sonamarg Dam Project.			
	(ii) Lidder Hydel Project Chandanwari } Pahalgam	100.00	100.00	..
7.	Micro Hydels	50.00	50.00	..
Total: (A)		3472.75	3472.75	
B—Transmission And Distribution				
1.	Jammu-Kalakote Line.	8.80	8.80	..
2.	Udhampur-Pompore-Bemina 132 KV line	105.25	105.25	20.00
3.	Uri-Pampore 220 KV D. C. Line and associated Sub-Stations.	20.00	20.00	..
4.	Kishtwar-Batote-Udhampur 220 KV D.C. Line and associated Sub-Stations/ Kishtwar-Daksum Pampore 220 KV Line.	20.00	20.00	..

5.	Batote-Bemina 220 K. V. D. C. Line and associated Sub-Stations.	20.00	20.00	—
6.	Grid Stations			
	i) Udampur.	100.00	100.00	
	ii) Pampore.	75.20	75.20	
	iii) Anantnag.	50.00	50.00	
	iv) Amargarh.	50.00	50.00	
	v) Batote.	50.00	50.00	
	vi) Kathua.	50.00	50.00	
7.	Augmentation Grid Station, Janipur.	50.00	50.00	
8.	Augmentation Grid Station, Bemina.	50.00	50.00	
9.	Sub-Transmission.	700.00	700.00	
10.	L. T. Distribution system.	350.00	350.00	
Total (B)		1690.00	1690.00	20.00
C.	Other Schemes :			
11.	Minimum needs programme (Rural Electrification)	1000.00	1000.00	—
12.	Surveys and Investigations.	384.25	384.25	—
13.	Micellaneous Works.	—	—	—
Total (C)		1384.25	1384.25	—
Total (A) + (B) + (C)		6556.00	6556.00	20.00

Fifth plan 1974-79
Selected Physical Targets

Head/Sub-head/item	Unit	Base level 1973-74	5th Plan Target level (1974-79)
1. Lower Jhelum Hydel Project		—	1) 3 units of 35 MWS to be commissioned.
2. Upper Sindh Hydel project	1 unit of 11.3 MW commissioned		2) unit No. 2 of 11.3 MWS to be commissioned by June 1974.
3. Chenani Hydel Project	3 units commissioned		3) Other two units to be commissioned together with completion of spill-over civil works.
4. Chenani-Srinagar 132 KV Transmission Line			4) Transmission line under construction scheduled to be completed by June, 1974.

Chapter VIII

Industry & Mining

I. Industry

The work participation ratio in the State is 29.76% only. This does not take into account under-employment and disguised unemployment in the rural areas. With the increase in population it would not be possible for agriculture to absorb additions to the work force. The only alternative is to improve the position of employment and incomes by the development of industry. The level of industrial development in the State has, however, lagged behind many of our neighbouring States, especially the Punjab and Haryana. The contribution of the industrial sector to the State income is hardly 2% against an All India average of 14.7%. The relative backwardness of our industrial sector is attributable to a variety of reasons most important of which is our geography. Besides, lack of appropriate infrastructure, especially power which has hindered its growth. In view of high costs of transportation of raw material and semi-finished goods reliance will have to be placed more on industrial use of locally available raw materials. These are industrial timber, temperate fruits, lime-stone and other minerals and sericulture. There is also vast potential of development of power

and temperate areas are suitable for location of precision industries and manufacture of high value items.

2—Large and Medium Industries

Notwithstanding the handicaps mentioned above some progress has been made in the field of industrial growth during the Fourth Plan. This has been done in two directions; one relating to the effort on the part of the Government to develop industrial areas and infrastructural facilities and the other by way of providing share capital to the Public Sector Undertakings to enable them to set up new units by utilising the raw materials available in the State, in the former category, land, after development, has been allotted to H.M.T. Unit and Indian Telephone Industries Ltd. A number of applications have been received for establishment of electronic industry in Kashmir Valley. The firms are negotiating with collaborators for setting up these industries. Similarly a Cigarette Factory at a cost of Rs. 3.86 crores is being set up in Jammu. M/S Chinab Textile Mills at Kathua are expanding their factory by raising the spindleage from 12,600 to 25,000. In order to

explore the possibility of setting up of new large and medium industries in the State, project reports are being prepared with the help of consultants. The Bulgarian firm of M/S Techno Exports has been entrusted with the work of preparation of a project report for setting up of a large sized factory for production of apple juice and pectine, canning of fruits and dehydration of fruits and vegetables. A fruit processing complex for manufacture of juices, beer, alcohol, malt and bottling is in an advance stage for implementation. The J&K Industries Ltd. has taken up modernisation of the Woollen Mills which is in progress. This Corporation has some other schemes such as expansion of Spinning Mills, Leather Tanneries, Brick and Tile Factory, modernisation programme of Rosin and Turpentine Factory and Handloom Silk Weaving Factory. The Industrial Development Corporation Ltd. which is another Public Sector Undertaking, has set up a Modern Rice Mill as a direct promotion with a capital of Rs. 32.00 lakhs. The Corporation has, with the help of Industrial Consultants, got prepared techno-economic feasibility reports on the solvent extraction of oil from rice bran, particle board from paddy husk, Beet Sugar Factory with its anciliaries, Cigarette Factory, Brick and Tile Factory, Maize pressing Plant, Feed Milling Plant, solvent extraction of Soyabeans, walnut packing, Chip Board Project, Poly-urethane flexible and rigid foam plant, Superphosphate and mixed fertilizer, Low temperature Carbonisation Plant and Towel Soap making mill.

5th Plan

For Fifth Plan the strategy to be adopted for industrial growth of the State include the development of infrastructural facilities, training programmes and development of Public Sector Undertakings by

providing equity share capital so as to enable them to set up new factories and expand production capacity in existing ones. The balance requirement of capital by the Public Sector Undertakings will be met by borrowing from the financial institutions. An outlay of Rs. 909.00 lakhs has been provided for the major and medium industrial schemes as under :—

Deptt./Undertaking/Project	(Rs. in lakhs)	
	Total cost	Outlay included as equity in the 5th Plan
J&K Industrial Dev. Corp: Ltd.		
1. Cigarette Factory	386.00	20.00
2. Low Temperature Carbonisation Plant	300.00	20.00
3. Solvent Extraction Plant (Rice Bran)	27.00	16.00
4. Hard and particle Board from paddy husk	51.00	5.00
5. Sugar Beet Factory	1173.00	50.00
TOTAL :	1937.00	111.00
J&K Industries Ltd.		
1. Wool Combing Plant	230.00	84.00
2. New joinery Mills	55.60	22.00
3. Kraft & Special Paper	2770.00	275.00
4. Fruit Processing Complex	600.00	65.00
Spill-over Schemes		
5. Woollen Mills	162.00	13.50
6. Match Factory	6.00	4.50
TOTAL :	3823.60	464.00
J&K Minerals Ltd.		
1. Kashmir Cement Factory	600.00	240.00
2. Basohli Cement Factory	1050.00	25.00
3. Aluminium Refractory	250.00	50.00
TOTAL :	1900.00	315.00

Deptt/undertaking/Project	Total cost	(Rs in lakhs) Outlay included as equity in the 5th Plan
Directorate of Industries & Commerce		
1. Industrial Areas		10.00
2. Kashmir Ceramics Ltd.		5.00
3. Training Programmes		4.00
TOTAL :		19.00
GRAND TOTAL :		7560.60 909.00

3. Physical description of each of the above schemes is given below :—

J&K Industrial Development Corporation Ltd.

Cigarette Factory

4. A letter of intent has been received from the Government of India for setting up of a Cigarette Factory for a capacity of 4,500 million cigarettes per annum. According to the feasibility project report prepared by a firm of consultants a total capital investment of Rs. 3.86 crores is required for this project. This include Rs. 1.5 crores as working capital. It is proposed to float a company with the required equity capital. An outlay of Rs. 20.00 lakhs has been included in the Plan for this factory. The factory is proposed to be set up in collaboration with M/S Golden Tobacco Company. The Factory will have an employment potential of 675 persons both skilled and un-skilled.

Low Temperature Carbonisation Plant

5. This is a new factory to be set up in Jammu for production of soft coke. The factory will have an annual production capacity of 45,000 tonnes of coke. A feasibility report has been prepared by M/S M. M. Suri & Associates, Pvt. Ltd. No foreign exchange will be required for this factory. The total cost of the factory is estimated at Rs. 3.00 crores which includes cost of land, buildings, machine etc. An outlay of Rs. 20.00 lakhs have been included in the Plan as equity capital for the factory. It

will have an employment potential of 162 after its completion.

Solvent Extraction Plant (Rice Bran)

It is expected that after milling 150 tonnes of paddy, per day, by the Modern Rice Mills, Lathepora (Kashmir) a quantity of 6.00 tonnes of rice bran with 20% oil will be available. There being a chronic shortage of oil in the Valley of Kashmir, it is proposed to set up a solvent extraction factory to extract oil from bran as also explore possibility of extraction of residual oil from the mustard oil cakes by subjecting the cake to solvent extraction. Total cost of the project is estimated at Rs. 27.00 lakhs. An outlay of Rs. 16.00 lakhs has been included in the Plan for this factory

Hard and Particle Board from Paddy Husk

This factory like the above one will be fed on the raw materials made available by the Modern Rice Mills Lathepora (Kashmir) where huge quantity of paddy husk will be available. A project report has been prepared for manufacture of Hard Board and particle Board based on the binderless process development by the Regional Research Laboratory Jorhat. Total cost of the Factory is estimated at Rs. 51.00 lakhs. The process is licensed in favour of the National Research Development Corporation which has been approached for taking up the project as a pioneering project i.e. providing knowhow, plant and machinery and cost of buildings while the J & K Industrial Development Corporation Ltd. will provide capital for purchase of land and site development. On successful performance of the project, the J&K I.D.C. will reimburse to N.R.D.C. its investment in the Factory. An outlay of Rs. 5.00 lakhs has been included in the 5th

Plan for the scheme.

Sugar Factory

A letter of intent has been issued by the Government of India for setting up of the Sugar Factory based on Beet with a diffusion capacity of 20,000 tonnes beet roots per day, and annual production capacity 20,000 tonnes of crystal sugar. The total requirement of beet roots will be 1.60 lakh tonnes per year which is proposed to be raised from 10,000 acres of irrigated land in the State. The total capital investment required for the factory is Rs. 1,173.00 lakhs inclusive of Rs. 177.00 lakhs as working capital. An outlay of Rs. 50.00 lakhs has been included in the Fifth Plan as equity capital to be provided by the State Government. The factory will have an employment potential of 1,400 persons.

J&K Industries Ltd.

Wool Combing Plant

The Government of India have issued a letter of intent in favour of the Corporation for setting up of Wool Combing Plant for a capacity of 1.5 Million Lbs. of wool tops. The factory will be located at Baribrahmana in Jammu. M/S Gerzy Eastern Ltd. Bombay have been appointed as consultants of the factory who have prepared a feasibility report. The factory will have an employment potential of 341 excluding unskilled workers. The total cost of the scheme is estimated at Rs. 230.00 lakhs. An outlay of Rs. 84.00 lakhs has been included for the scheme in the 5th Plan as equity capital to be provided by the Government. Annual requirement of raw material is estimated at 11.00 lakh kgs. of merino and other types of wool.

New Joinery Mills

A new Joinery Mill will be located at

Baribrahmana (Jammu) which will need a total capital investment of Rs. 55.60 lakhs. The scheme will involve a foreign exchange component of Rs. 5.00 lakhs. A feasibility report has been prepared by the experts of the J&K Industries Ltd. The factory will manufacture doors and windows, cable drums and furniture. Setting up of the factory will enable utilisation of the forest resources of the State. The project will have an employment potential of 838 workers. The factory will have an annual turn-over of Rs. 1.42 crores. Other requirement of raw material estimated at Rs. 5.15 lakhs.

Kraft Specially Paper

The factory will be set up in Kashmir Valley for a production capacity of 150 tonnes per day. A feasibility report has been prepared by a consultant of Bombay. The total cost of the project is estimated at Rs. 27.70 crores, out of which the Government contribution is Rs. 2.75 crores as equity capital, to be provided wholly during the Fifth Plan period. The requirement of raw material is estimated at 49.5 thousand tonnes of timber for running the factory to its full capacity. It will have an employment potential of 1,284 persons.

Fruit Processing Complex

There is available every year a huge quantity of fruit which for one reason or the other cannot be exported from the State. It is estimated that 54,000 tonnes of fruit including pre-falling and culls become available every year which can be used for processing in the Valley. In order to utilise these fruits, as raw material, a fruit-processing complex will be set up in joint sector for manufacture of juices, beverages, bottles etc. The total cost of the factory is estimated at Rs. 6.00 crores. No

foreign exchange will be required for the factory. An outlay of Rs. 65.00 lakhs representing the State Government's equity capital has been included in the Plan.

Spill-over Schemes

Woollen Mills

Modernization of Match Factory

Most of the modernisation work of the Woollen Mills has almost been completed. An outlay of Rs. 13.50 lakhs will, however, be required for the Fifth Plan on account of deferred payments, for machinery purchased earlier. As regards modernisation of the Match Factory, a spill-over of Rs. 4.50 lakhs is required during the Fifth Plan for completion of the Scheme.

J&K Minerals Ltd.

Khrew Cement Factory

A new cement factory is proposed to be set up in Kashmir Valley which will be located at Khrew. It will have a production capacity of 350 tonnes of cement, per day. A feasibility report has been prepared by M/s Holtec Engineers Pvt. Ltd. Patna. Total cost of the project is estimated at Rs. 6.00 crores out of which 40% will require to be met by the Government as equity capital. An outlay of Rs. 240.00 lakhs has accordingly been included for this scheme in the Plan. The factory will have an employment potential of 646. The requirement of raw-material is estimated as 1.30 lakh tonnes of lime-stone, 0.30 lakh tonnes of clay, 0.045 lakh tonnes of sand, an equal quantity of gypsum and 0.29 lakh tonnes of coal.

Basohli Cement Factory

A preliminary feasibility report has been

prepared by M/s Chemical and Metallurgical Designs Company. The total cost of the factory is estimated at 10.50 crores for a production capacity of 600 tonnes of cement per day. Investigation into the availability of quality lime stone deposits which will be used as raw material for the factory are in hand. Samples are under examination and process of testing.

Directorate of Industries and Commerce

Development of Industrial Area:

One of the incentives provided by the State Government to the private entrepreneurs is allotment of developed plots with necessary infrastructure for setting up of new factories. It is proposed to develop new areas over 250 acres for 10 units. An outlay of Rs. 10.00 lakhs has been provided for this purpose. Some medium scale units are showing interest and it is expected that about 50 such units will come up by the end of the Fifth Plan. Some of the important units for which either letters of intent or industrial licences have been issued on Television manufacture, Shoddy plant, Brewery, machinised brick and tile factory. Sugar factory etc. Besides, this issue of letter of intent by the Government of India in fruit processing, Modipan project and manufacture of electronic components is under consideration. Out of the 50 units, 40 units are expected to come up in the Joint Sector. For the remaining 10 units, land to the extent of 250 acres will be needed. It is proposed to float an Industrial Development Corp. to whom margin money will be provided by the Government for raising institutional finance.

Kashmir Ceramics Ltd. Kathua

Under the present terms of agreement entered into with the Company, the State

Government is required to meet the difference between the contracted rate of tariff and the rate of electric power supply for a period of 20 years. The arrangement is to extend to the 5th Plan and an outlay of Rs. 5 lakhs has been provided for this purpose.

Training Programme

The training programme which covers

managerial and in plant training for the technical staff will continue during 5th Plan. This is estimated to cost Rs. 4.00 lakhs to be utilised on payment of stipend to the trainees to be recruited locally by large and medium scale industrial units. It is expected that 50 technicians and 100 graduate engineers will be trained during the 5th Plan.

—o—

Basic information about industrial projects

1. Name and capacity of the project

- | | | |
|----------------------------------|----|--|
| i) Name of the Project | .. | Wool-combing plant |
| ii) Location (actual or likely) | .. | Bari-Brahamana, Jammu |
| iii) Nature of the Project | .. | Wool Combing |
| a) New Project | .. | New Project |
| b) Expansion of existing project | .. | — — |
| iv) Product/output | .. | The plant will provide combing facilities for the Woollen Mills & Spinning Mills of J & K Industries Ltd. and will cater to combing services within the State and other parts of the Northern India. The turnover will be Rs. 226 lakhs per annum. |
| a) Capacity | .. | Processing of 1.5 million Lbs. of wool tops |

2. Schedule of Implementation

- | | | |
|---|----|--|
| i) Whether feasibility study/ DPR prepared | .. | Yes. |
| a) By whom | — | M/S Gerzy Eastern Ltd. Bombay |
| b) Present status-whether approved submitted for approval etc. | .. | Letter of Intent issued by the Government of India |
| ii) Nature of foreign collaboration required technical or financial | .. | None |
| iii) Date of start of construction | .. | 1974. |
| iv) Date of commencement of production | .. | Beginning of 1976-77. |
| v) Achievement/operated capacity, likely date | .. | After a year of completion of the project. |

3. Production Expenditure

- | | | |
|---------------------------|----|----------------|
| | | (Rs. in lakhs) |
| i) Land and Buildings | .. | 38.30 |
| ii) Service Installation | .. | 30.90 |
| iii) Production Machinery | .. | 121.81 |

*Production Expenditure**(Rs in Lakhs)*

Office Equipment	..	2.55
Pre operation expenses	..	9.00
Contingencies	..	20.25
Margin money for working capital	..	10.00

Total :- 232.81

Say Rs. 230.00

Financing and execution of the Project

Name of the executing agency	..	J & K Industries Ltd.
Arrangements for financing	..	Application for financial assistance made to I.D.B. Rs. 146.00 lakhs will be borrowing from financial institutions and Rs. 84 00 lakhs will be provided by the Government as equity capital.

To what extent resources of the company/Corporation are to be deployed

.. ..

Material requirement

i) Steel

..

ii) Cement

..

Employment Potential

During construction

..

13

After construction

..

164

i) Managerial

..

1

Technical Enggs. and Supvr.

..

38

Clerical

..

16

i) Skilled workmen

..

109

ii) Unskilled

-

Nil

341

Raw Material Requirements

i) Kashmir Marinoo

..

28,46ⁿ Kgs.

ii) Kashmir Cross-breed

..

5,56,820 Kgs.

iii) Austrian Marinoo

..

2 50,000 Kgs.

iv) Synthetics

..

2,00,000 Kgs.

Total : 10,35,280 Kgs.

Name and capacity of the Project

Name of the Project

..

New Joinery Mills

Location (actual or likely)

..

Bari-Brahamana Jammu.

Nature of the Projects

..

The project envisages production of doors and windows Cable drums and furniture in order to utilize forest resources of Jammu province.

- a) New Project .. New Project
 b) Expansion of existing project ..
- iv) Products/outputs ..
 a) Capacity .. The factory will have a turnover of Rs. 142.00 lakhs per annum.
2. *Schedule of Implementation*
 i) Whether feasibility study / DPR
 Prep .. Yes
 a) By whom .. Experts of J&K Industries Ltd.
 b) Present status-whether approved submitted for approval etc. . Submitted to Govt. for approval.
 ii) Nature of foreign collaboration required technical or financial ..
 iii) Date of start of construction .. Middle of 1974
 iv) Date of commencement of production .. 1975
 v) Achievement operated capacity likely date ..
3. *Project Expenditure*
 i) Land and site .. }
 ii) Building and Civil works .. } Rs. 55.60 lakhs
 iii) Machinery and equipment .. }
 iv) Others .. }
4. *Financing and Execution of the Project*
 i) Nature of the executing agency .. J and K Industries Ltd. Srinagar.
 ii) Arrangements for financing .. Rs. 33.60 lakhs by borrowing from financial institutions, and Rs. 22.00 lakhs as equity from the Govt.
 iii) To what extent internal resources of the company/Corp. are to be deployed ..
5. *Material Requirements*
 i) Steel ..
 ii) Cement ..
6. *Employment Potential*
 i) During construction .. The total employment required for the project will be about 838 persons.
 ii) After construction ..
 iii) Managerial ..
 iv) Technical Engineers and Supervisors ..
 v) Clerical ..
 vi) Skilled workmen ..
 vii) Unskilled workmen ..
7. *Raw Material Requirement* .. 5.15 lakh Cft. of timber
1. *Name and Capacity of the Project*
 i) Name of the Project .. Kraft Paper Project
 ii) Location (actual or likely) .. Kichabama in Baramulla District Kashmir Valley
 iii) Nature of the project .. The Project envisages production of Kraft and Special Papers.
 a) New Project .. New Project

- b) Expansion of existing project ..
 Production/Output .. 150 tonnes per day
 a) Capacity ..

Schedule of Implementation

- Whether feasibility study / DPR prepared ... Yes
 a) By whom ... M/s Industrial Consulting Bureau Pvt. Ltd. Bombay.
 b) Present status-whether approved submitted for approval about product-mix etc. are completed.
 etc. ...
 i) Nature of foreign collaboration required technical or financial ..
 ii) Date of start of construction .. 1974 - 75
 iii) Date of commencement of production .. End of 5th Plan
 iv) Achievement / operated capacity likely date ..

Project Expenditure

- i) Land and site dev. } ..
 ii) Building and Civil Works } .. Rs. 2770.00 Lakhs.
 iii) Machinery and Equipment } ..
 iv) Others } ..

Financing and Execution of the Project

- i) Name of the executing agency.. J&K Industries Ltd. in the Joint Sector.
 ii) Arrangements for financing .. The project will be in the joint sector and out of the total cost of Rs. 2770.00 lakhs the Govt. will have to contribute Rs. 300 lakhs as equity.
 iii) To what extent internal resources of the company/Corp. are to be deployed. - ...

Material Requirement

- i) Steel ..
 ii) Cement ..

Employment Potential

- i) During construction ..
 ii) After construction ..
 iii) Managerial ..
 iv) Tech. Eng. and Supervisors .. } 1,284
 v) Clerical ..
 vi) Skilled workmen ..
 vii) Semi skilled workmen ..

Raw Material Requirement - 49,500 tonnes

Name and capacity of the project

- i) Name of the project .. Fruit processing project
 ii) Location (actual or likely) .. Kashmir Valley
 iii) Nature of the projects .. Fruit juice and paction, Beer etc.

- iv) New project .. New project
- b) Expansion of existing project ..
- iv) Product/output ..
 - a) Capacity Apple processing 10 thousand, Beer 50 thousand H. L. Yearly, Liquor 1 thousand Gls. per day, Malt 10 ton per day, Glass 12 thousand a day.
- 2. *Schedule of implementation*
 - i) whether feasibility study/D P R prepared .. Volume I of the project report has been submitted to the Planning Commission for approval.
 - a) By whom
 - b) Present status-whether approved submitted for approval etc. ..
 - i) Nature of foreign collaboration required technical financial ..
 - ii) Date of start of construction .. 1974-75
 - iii) Date of commencement of production .. 1977-78
 - iv) Achievement operated capacity likely date ..
- 3. *Project expenditure*
 - i) Land -
 - ii) Buildings and civil works .. Rs. 600 lakhs (details not yet available).
 - iii) Machinery equipment ..
 - iv) Others ..
- 4. *Financing & Execution of the project*
 - i) Name of the executing agency. .. J&K Industries Ltd. in collaboration with the Narang Group of Industries.
 - ii) Arrangements for financing The project will be in the joint sector and the Govt. will have to provide Rs. 65.00 lakhs as equity.
- 5. *Material Requirements*
 - i) Steel ..
 - ii) Cement ..
- 6. *Employment potential*
 - i) During construction .. 500 (However actual No. will be known after detailed project report is ready).
 - ii) After construction ..
 - iii) Managerial ..
 - iv) Technical Enggs & Supervisors ..

- v) Clerical ..
 i) Skilled workmen ..
 ii) Unskilled workmen ..
 Raw material

Apple 10,000 tonnes
 Quartzite 10,000—do—
 Limestone 2,000—do—
 Soda-ash 2,300—do—
 Barley 5,000—do—

Name and capacity of the project

- i) Name of the project .. Khrew Cement Factory
 ii) Location (actual or likely) .. Khrew (Kashmir)
 iii) Nature of Project .. Cement Production
 a) New Project .. New Project
 b) Expansion of existing project ..
 iv) Products/output .. The factory will produce 350 tonnes of cement per day
 a) Capacity .. do.

2. Schedule of implementation

- i) Whether feasibility study/DPR prepared .. Yes
 a) By whom .. M/s Holtee Engineers Pvt. Ltd. Patna
 b) Present status whether approved submitted for approval etc. .. Submitted for approval.
 ii) Nature of foreign collaboration required technical or financial ..
 iii) Date of start of construction .. 1974
 iv) Date of commencement of production .. End of 1976-77
 v) Achievement operated capacity likely date ..

3. Project Expenditure

- i) Land and site development } ..
 ii) Building and Civil works } Rs. 600 lakhs
 iii) Machinery and Equipment }
 iv) Others }

4 Financing and Execution of the Project

- i) Name of the executing agency J and K Minerals Ltd.
 ii) Arrangements for financing Rs. 360.00 lakhs will be arranged as loan from the financial institutions while Rs. 240.00 lakhs will be paid by the Government as equity.
 iii) To what extent internal resources of the company/Crop. are to be deployed.

5. *Material Requirement*

- i) Steel
- ii) Cement

6. *Employment Potential*

i) During construction	..	Officers/Supervisors	32
ii) After construction	..	Jr. Supervisors	26
iii) Managerial		Labour	
iv) Technical-Enggs. and Supervisors	..	Skilled	
v) Clerical	..	Semi-skilled	
vi) Skilled workmen	..	Un-skilled	588
vii) Un-skilled workmen	..		
Total :-			646

7. *Raw Material Requirements*

i) Limestone	1,30,000	tonnes
ii) Clay	30,000	do.
iii) Sand	4,500	do.
iv) Gypsum	4,500	do.
v) Coal	29,000	do.

1. *Name and capacity of the project*

i) Name of the project	..	Basohli Cement project
ii) Location (actual or likely)	..	Basohli Jammu
iii) Nature of the project	..	Cement production
a) New project		New project
b) Expansion of existing project --		.....
c) Capacity		600 tonnes per day

2. *Schedule of Implementation*

i) Whether feasibility study/DPR prepared	..	Yes.
a) By whom	..	By M/Moltec Ltd.
b) Present status-whether approved submitted for approval etc.		Submitted for approval
ii) Nature of foreign collaboration required technical or financial	..	
iii) Date of start of construction	..	
iv) Date of commencement of production	..	End of V plan
v) Achievement operated capacity /likely date	..	

Project expenditure

Land and site developement	..	
Building and civil works	..	Rs. 1050 lakhs
Machinery and equipment	..	
others	..	

Financing and Execution of the Project

Name of the Executing agency	..	J and K Minerals Ltd.
Arrangement for financing	..	60% of the outlay will be arranged as loan from the financial institutions and 40% will be paid by the Govt. as equity.
To what extent internal resources of the company/corp. are to be deployed	..	

Material Requirement

Steel	..
Cement	..

Employment Potential

During construction	..
After construction	..
Managerial	..
Technical-Enggs. and Supr.	..
Clerical	..
Skilled workmen	..
Un-skilled workers	..

Name and capacity of the Project

Name of Project	Particle Board (composite)
Location (actual or likely)	Lethpora (Kashmir)
Nature of the Project: —	New Project
a) New Project	
b) Expansion of existing project	
Products/ out-put	Particle Board
a. Capacity	3000 tonnes per annum

Schedule of Implementation

Whether feasibility study	Yes
DFA Prepared	Industrial Consulting Bureau Pvt. Ltd.
By whom	Under consideration
Present Status-whether approved submitted for approval etc.	

ii) Nature of Foreign collaboration required tech. or financial	No.
iii) Date of start of construction	1947-75
iv) Date of commencement of Production	24 months after the date of construction
v) Achievement of rated capacity likely date	3rd year onwards from the date of commencement of production.
3. Project Expenditure	
i) Land	Rs. 1.50 lakhs
ii) Building & Civil works	Rs. 6.00 lakhs
iii) Machinery & equipment	Rs. 37.00 lakhs
iv) Working capital and Others	Rs. 6.00 lakhs
	Rs. 51.00 lakhs
4. Finances and Execution of the Project	
i) Nature of the executing agency	IDC in collaboration with NIDC
ii) Arrangements for financing	Partly by borrowing from financial Insts. and Partly as State Govt. equity capital
iii) Source and extent of institutional finance envisaged	Long term borrowing from the Financial Institutions to the extent of Rs. 46.00 lakhs and equity to the extent of Rs. 500. lakhs from the State Government.
iv) To what extent internal resources of the company Corp. are be deployed	36% of the equity capital
5. Material Requirements	
i) Steel	30 tonnes
ii) Cement	130 tonnes
6. Power requirement	700 KWs
7. Employment Potential	
i) During construction	
ii) After construction	
a) Managerial	5
b) Technical-Enggs. & Suprs.	32
c) Clerical	8
d) Skilled workmen	12
e) Unskilled workmen	15

Negotiations are going on with National Research Development Corp. of India for setting up a Particle Board Plant based on the paddy husk that will become available at the Modern Rice Mills as a proving project. The process used is binderless which is licensed to (NRDC).

Name and capacity of the Project

i) Name of the Project ..	Cigarette factory
ii) Location (actual or likely) ..	Jammu.
ii) Nature of the Project ..	
a) New Project ..	New Project
b) Expansion of existing project ..	
iv) Products/output	Cigarette
a) Capacity ..	45,000 million Cigarettes a year

Schedule of Implementation

i) Whether feasibility study DFA prepared ..	Yes
a) By whom	M/s Creative Marketing Consultants Service Pvt. Ltd.
b) Present status-whether approved submitted for approval ect. ..	Approved letter of intent issued by Government of India-
ii) Nature of foreign collaboration required tech. or financial ..	Financial
iii) Date of start of const. ..	August 1973
iv) Date of commencement of production ..	18 months after start of construction
v) Achievement of rated capacity likely date. ..	4th year onwards from the date of commencement of production.

3 Project Expenditure

	Rs. in lakhs
i) Land ..	5.00
ii) Building & Civil works ..	40.00
iii) Machinery and equipment ..	186.00
iv) Working capital and others ..	155.00
	<hr/>
	386.00
	<hr/>

4. Finances and Execution of the Project

i) Name of the executing agency ..	J & K State Industrial Dev. Corporation Ltd. J & K Srinagar in collaboration with M/S Golden Tobacco Co.
ii) Arrangements of financing ..	
iii) Source and extent of institutional finance envisaged ..	Long term borrowings from the financial institutions
iv) To what extent internal resources of the company. Corporation are to be deployed ..	26% of the equity capital

5. Material Requirement

i) Steel ..	16.00 lakhs (500 tonnes)
ii) Cement ..	4.00 lakhs (800 tonnes)

6. Power requirement — 75 KWH

7. *Employment Potential*

i)	During construction	—
ii)	After construction	}
	a) Managerial	|
	b) Technical Enggs. & Supers	|
	c) Clerical workmen	}
	d) Skilled workmen	|
	e) Unskilled workmen	}
Total :		675

Industrial Development Corporation has received letter of intent and is negotiating with GTC to establish this Industry as a Joint Venture with IDC.

1. *Name and Capacity of the Project* ..

i)	Name of the project	..	Low Temperature Carbonisation plant
ii)	Location(actual or likely)	..	Jammu
iii)	Nature of the Project	..	
	a) New Project		New Project
	b) Expansion of existing project..		No
iv)	Products/output		Soft-coke
	a) Capacity		300 tonnes of coal per day

2. *Schedule of Implementation* ..

a)	weather feasibility study DFA prepared	Yes
b)	By whom	.. M/S M. M. Suri and Associates Pvt. Ltd.
c)	Nature of foreign collaboration required technical or financial	No
iii/	Date of start of construction	Not yet decided
iv/	Date of commencement of production	After 18 months of start of construction
v/	Achievement of rated capacity likely date	In 3rd year of production

3. *Project Expenditure* ...

i/	Land	}	Rs. 12.00 lakhs
ii/	Building and Civil works	}	
iii/	Machinery and equipment	—	Rs. 258.00 lakhs
iv/	Others		Rs. 20.00 lakhs
			Rs.300.00 lakhs

4 *Finances and Execution of the Project*

i/	Name of the execution agency	..	J and K State Industrial Development Corp. Ltd. In collaboration with Central Govt.
----	------------------------------	----	---

- i/ Arrangements for financing .. Partly by borrowing from the financial Institutions and partly from the equity capital.
- i/ Source and extent of institutional finance envisaged .. Long term borrowing Rs. 180.00 lakhs from Financial Insts.
- v/ To what extent internal resources of the Company/Corp. are to be deployed .. 26% of the equity capital

5. Material Requirements

- i/ Steel .. 100 tonnes
- ii/ Cement .. 200 tonnes

6. Power requirement .. 400 K. W.

7. EMPLOYMENT POTENTIAL ..

- i) During construction ..
- ii) After construction ..
- a) Managerial .. 5
- b) Tech. Engineers & Suprs. .. 26
- c) Clerical .. 20
- d) Skilled workmen .. 59
- e) Unskilled workmen .. 52

162

There is chronic shortage of fuel in the valley and valuable wood is used as fuel besides hard coke is also being imported and used as domestic fuel. The project is based on import of weekly or medium cooking coal as raw material on which freight charged from rail head to the factory site will be 50% only. The ex-factory rate of coal works out Rs. 160 per ton.

Statement

SCHEMEWISE OUTLAY FOR THE LARGE AND MEDIUM INDUSTRIAL
PROJECTS IN 5TH PLAN.

(Rs. in lakhs)

S. No.	Head/sub-head/scheme	Total Estimated cost	Anti: Expd. ending 4th Plan	5th Plan approved outlay		
				Total	Cap.	F. E.
1	2	3	4	5	6	7
<i>Industries and Mining</i>						
<i>Large and Medium Industries</i>						
A—Schemes of J and K Industrial Development Corporation						
1.	Cigarette Factory ..	386.00	6.00	20.00	20.00	..
2.	Low Temperature Carbonization Plant ..	3.00.00	..	20.00	20.00	..
3.	Solvent Extraction Plant (Rice Bran) ..	27.00	2.00	16.00	16.00	..
4.	Hard & particle Board (Rice Husk) ..	51.00	..	5.00	5.00	..
5.	Beet Sugar Factory	1173.00	..	50.00	50.00	..
Total A		1937.00	8.00	111.00	111.00	..
B Scheme of J and K Industries Ltd.						
1.	Wool Combing Factory ..	230.00	..	84.00	84.00	82.20
2.	New Joinery Mills	55.00	..	22.00	22.00	5.00
3.	Kraft Paper Factory	2770.00	..	275.00	275.00	..
4.	Fruit Processing Factory ..	600.00	..	65.00	65.00	..
<i>Spill over schemes</i>						
1.	Moderinazation of Woollen Mills ..	162.00	148.50	13.50	13.50	13.50
2.	Moderinazation of Match and Pharmaceutical Factories	6.00	1.50	4.50	4.50	..
Total B		3823.00	150.00	464.00	464.00	100.70

Schemes of J and K Minerals Ltd.

Kashmir Cement Factory (Khrew) ..	600 00	..	240.00	240.00	..
Basohli Cement Factory ..	1050.00	4.40	25.00	25.00	..
Aluminium Refractories	250.00	..	50.00	50.00	..
Total C	1900.00	4.40	315.00	315.00	..

Schemes of Director Industries and Commerce

Industrial Areas	..	..	10.00	10 00	..
Kashmir Ceramics (A joint vention) ..	..	..	5 00	5.00	..
Training Programme	..	..	4.00	..	..
otal D	..	..	19 00	15.00	..
Grand Total A B C and D	7660.60	162.40	909 00	905.00	100.70

3. Village and Small Scale Industries

Progress in the field of Small Scale Industry has been much more marked than in the sphere of large scale industry, in spite of various handicaps in the way of industrial development generally as discussed in the earlier chapter. Over 2,000 small industrial units have been registered. These are estimated to provide employment to about 9,000 people. In addition a number of units have come up which are under the process of registration. Four industrial projects have been set up, one each in Baramulla, Anantnag, Kathua and Doda districts to promote the development of small industries. As regards the textile sector, power looms and handlooms numbering 692 and 2100 looms respectively have been registered for wool and silk. 10 more power looms are coming up. The total employment generated by this industry is estimated at over 5,000. Under the State Aid to Industries Act, 162 parties have been benefited to whom loans to the tune of Rs. 75.59 lakhs have been advanced. Additional industrial sheds have been built in the industrial estates providing accommodation to 254 industrial units. Besides 174 industrial plots have been developed and allotted to the entrepreneurs. Under the incentive scheme, 70 entrepreneurs have set up small industrial units out of which 27 have already gone into production. Tax concessions have also been provided in a number of cases.

2. The handicrafts industry occupies an important place in the industrial development of the State as these provide di-

rect employment to more than 88 thousand people. The level of production is now Rs. 16 crores per annum. The industry is generally concentrated in the Valley of Kashmir. Main handicrafts are carpets, chain stitching rugs, Namdas, crewel embroidery and paper-machie, wood-carving, metal ware, leather goods, and jewellery etc. This industry has a wide international market. Considering the importance of this sector to the economy and in the field of employment, a separate Directorate of Handicrafts has been set up. Training programmes have been launched and over 1,000 boys and girls have received training in different crafts. Mobile carpet weaving training centres have been set up. A number of industrial co-operatives have been set up in different crafts to whom financial assistance has been provided by the Government in the form of share capital, loan and subsidy. These co-operatives are engaged in production of handicraft goods while their apex organisations undertake marketing of the finished product and provision of common facility.

3. A Corporation namely, J&K Handicrafts (Sales & Export) Corporation Ltd has been set up for promotion and sale of the handicraft goods both within the country and abroad. The Corporation has taken over the Government Arts Emporia with all its branches and the production centres which were previously under the control of the J&K Industries Ltd. Handicraft goods from the State have been dis-

played at foreign fairs such as Brussels, Milan and Tripoli. An export Catalogue has been prepared and distributed to various branches of the Emporia. Common facilities such as washing, dyeing, drying etc. are being provided to the handicraft workers. Several measures have been taken to improve the sales. The over-all sales of the Corporation have reached Rs. 63.68 lakhs during 1972-73 out of which goods worth Rs. 7.27 lakhs were exported. The sales have risen to Rs. 99.00 lakhs during 1973-74. The total number of artisans and craftsmen in production centres of the Corporation increased to 1,812 in 1972-73 compared to 320 in the year 1969-70. The employment has risen to 4,000 during 1973-74.

Sericulture is a traditional industry of the State and at present provides direct employment to 3,415 persons and subsidiary occupation to 33,000 families and silk worm rearers. During the Fourth Plan emphasis was laid on the production of quality silk worm seed by cut method which has produced encouraging results. The seed production has reached 28,000 ounces. There has been a steady growth in the production of cocoons and that of raw silk. It is anticipated that by the end of the Fourth Plan 26,667 Mds. of cocoon and 79,000 kgs. of raw silk will be produced. Due to drought and adverse weather conditions during the previous years there has been a slight fall in the cocoon production. This has been made good by import of foreign seed. Adequate attention is being given to research on mulberry, silk worm seed etc. Working of the basic seed stations as also of the industrial seed units has been re-organised. Rearing methods have been improved to ensure high productivity, per ounce of seed. Dwarf mulberry culture has been introduced for increasing production of leaf.

The State Khadi and Village Industries Board has intensified its activities and the financial assistance received by it from the All India Khadi and Village Industries Commission it has provided assistance to the extent of Rs. 98 lakhs and set up Co-operative Societies. Value of the goods produced is estimated at Rs. 4.37 crores and total sales have amounted to Rs. 4.37 crores. The total employment generated is of the order of 22,000 jobs.

5th Plan

The Small Scale Industries will have to play a key role in the industrial growth of the State in the years to come. The approach to achieve accelerated growth will be to provide infrastructure facilities, increased production of consumer goods meeting increased demand, mobilization of capital and skill, dispersal of industries to the rural areas and to give an export orientation to this sector. It is expected that at least 5,000 new units will come up during the Fifth Plan. To achieve this objective, various facilities have to be provided to this sector. One of such facilities is availability of credit. The Commercial Banks will have to play a big role in this respect and adopt bolder policies of investment. It will, however, be difficult for the unit to bear the brunt of servicing inter-liabilities. Provision of some relief to this by subsidising a part of the interest charges will be necessary. Adequate arrangements will have to be made for providing raw material in the requisite quantities and at cheap rates. For this purpose, direct allotments will have to be earmarked in favour of the State so that uninterrupted supply follows. The scheme of incentives will continue. Reservation will be made for manufacture of some specified items by the small scale industries exclusively such as spare parts for transport and textile industries. In the field of handicrafts dev-

ent, it is necessary to train people in crafts as are job oriented. About 100 boys and girls both in rural and urban areas of the State will be trained. With increase in production of the handicraft goods, it is necessary to provide adequate marketing facilities so as to ensure maximum returns for the workers. For this purpose apex marketing societies will be organised. Along with such societies, handicrafts workers will be grouped into co-operative societies and arrangements made for providing common facilities, training and improvement in design techniques. Some capital will be paid to such societies which will enable them to borrow the requirement of working capital from the banks. For increasing sales of handicrafts both within the country and abroad, steps will be taken to give an export orientation to the industry, the Handicrafts Corporation Ltd. will build a library of designs and samples for the guidance and education of artisans for developing quality production increasing the availability of trained salesmen and develop its branches.

For achieving the objectives set out above, an outlay of Rs. 900.00 lakhs has been provided in the Fifth Plan. The specific schemes proposed to be implemented are as under :—

No.	Name of the Scheme	(Outlay Rs. in lakhs)	Total	Capital
SMALL SCALE INDUSTRIES				
	Small Scale Industries Dev. Corp. (Dev. of industrial areas, rawmaterial procurement of machinery on hire purchase basis.)	65.00	65.00	
	Credit facilities (subsidy on Ind.)	8.20	..	
	Training (Small Scale Ind. and Textiles)	16.00	..	
	Organisational assistance	14.00	—	
	Other facilities for small Industries	86.00	9.00	9.00
	Quality Control			

1	2	3
7. Publications & Exhibitions	10.00	..
8. Handlooms and power Looms		
i) Raw material	9.44	..
ii) Training	3.00	
iii) Designs Dev.	1.36	...
iv) Improved tools	5.00	5.00
Total :		227.00 79.00

HANDICRAFTS

A - DIRECTORATE OF HANDICRAFTS

1. Strengthening of Directorate	10.00	..
2. Trainins-cum-Study Tours	5.00	..
3. Subsidy on Bank interest	5.00	..
4. Improvement in craft tech.	1.25	..
5. Exhibition and Seminars	2.50	..
6. Awards and incentives	1.00	..
7. Wool Seasoning Plant	2.00	..
8. Repairs to workers sheds	9.00	9.00
9. Training of Artisans	97.50	
10. Induscos	52.25	40.00
11. Training for Management	2.50	
12. School of Designs	6.00	..
13. Market Surveys	5.00	..
		200.00 49.00

B-J&K HANDICRAFTS (S&E) CORP LTD PRODUCTION

1. Expansion of Carpet Production	10.00	10.00
2. Estt. of a library of samples	2.00	2.00

TRAINING OF PERSONNEL & ARTISANS

1. Training of production and Sales personnel & Accts. in Management Accounting	3.50	3.50
2. Apprenticeship course of Wastakars.	5.00	5.00

BOOSTING OF EXPORT SALE

1. Market study and sales team	3.00	3.00
2. Participation in foreign exhibitions	10.00	10.00
3. Preparation of Export catalogue	1.50	1.50
Total :		35.00 35.00

Khadi and Village Industries Board	6.00	..
Sericulture	432.00	110.00

Grand total 900.00 273.30

Brief description of the schemes is given below :—

Small Industries Development Corp. Ltd.

A full-fledged Small Industries Development Corporation will be set up for development of infrastructural facilities, procurement and distribution of raw materials, procurement and supply of plant and machinery on higher purchase, provision of consultant service to entrepreneurs and assistance in the marketing of goods. Besides the Corporation will construct sheds for allotment to educated unemployed and technocrats. An outlay of Rs. 65.00 lakhs has been included in the Fifth Plan representing share capital of the Corporation to be subscribed by the Government. The Corporation will raise funds from the banks.

Credit Facilities

Subsidy on Interest

With the increase in the requirement of capital for various small scale industrial units, loan will have to be borrowed by the individual units from financial institutions. Since these institutions charge high rate of interest, it is necessary to subsidize the rate of interest which will provide relief to these units. The rate of subsidy may be to the extent of 50% of interest liability.

Trainings

The Engineering and Chemical units largely depend upon the labour imported from outside the State. It is proposed to train local people in various institutions through the Small Scale Industries Development Commissioner, Government of India. The State Government will meet 50% stipend of the trainees. It is also proposed to train managers, executives and assistant executives on the same financial

pattern. Stipend will also be granted to such technocrats and unemployed graduates as are identified for a particular scheme and take preliminary effective steps to implement it. Payment of the stipend will be operative up to the period, implementation of the scheme is taken up. After selecting a unit, such technocrats will be deputed for training in the specified fields by the Development Commissioner, Small Scale Industries, Government of India. Experts of Directorate of Industries and Commerce will be deputed to various institutions for extension courses. In all it is estimated that 500 educated persons, 1,000 skilled/semi-skilled labourers, 100 officers and 400 others will receive training during the Fifth Plan.

Other facilities to Small Scale Industries

The facilities for Small Scale Industries include exemption from the payment of State Sales Tax on end products for a period of three years. The exemption is applicable to industries identified from time to time. The Government are considering adopting Maharashtra pattern according to which long term, interest free, loans in lieu of State Sales Tax, is allotted to the entrepreneurs. Other facilities such as refund of toll tax, Central Sales Tax and refund of transport subsidy will continue during the Fifth Plan. It is proposed to set up a Small Scale Industries Corporation to help the small industrial units to get industrial raw materials and also assist them in the marketing of their products. The State Government has decided to grant 1/10th of the cost of fixed assets as outright cash subsidy to such entrepreneurs as locate their units outside the districts of Jammu, Doda, Srinagar and Baramulla, as these districts are eligible for such subsidy under the centrally sponsored scheme of Rural Industries Projects. The remain-

ing districts of the State will be governed by the incentive scheme of the State Government. Accordingly 1/10th of the cost of fixed assets of such of the new small industrial units as will come up during the Fifth Plan, will be subsidised.

Quality Control

The scope of the quality control scheme will be widened and rural areas also covered. Quality control facilities will be provided at three more places which will be provided with necessary equipment and running charges.

Publications and Exhibitions.

A new orientation will be given to the scheme. Besides educating people, by mass contacts, it is proposed to publish literature relating to industrial development in easy understandable languages. As such various industrial schemes will be translated into Hindi and Urdu. Monthly journals will also be published. These will contain information relating to incentives, availability of raw material, technical know-how and also information regarding latest techniques. A Cell for publicity and mass contact will be set up.

Organisational Assistance

The Department of Industries and Commerce will be strengthened to cater to the needs of all the districts and provide adequate supervision and technical assistance at various levels.

Steps will be taken for development of power looms and handlooms in the woollen, cotton and artificial silk industry in the State. These industries will make various improvements in their machinery and improve technique. 500 weavers will be

trained. 1,500 fly shuttles will be supplied to weavers in different parts of the State.

Directorate of Handicrafts

Strengthening of Organisation

The Directorate of Handicrafts will be strengthened by establishing Planning and Statistical division, training division, Accounts division, Quality Control division, Quality Control laboratory, loan and registration section and development section for Jammu. Strengthening of the Department is considered necessary to enable it to take up implementation of the programme envisaged during the Fifth Plan.

Training-cum-study Tours

2,000 persons will be trained each year. Thus 10,000 people will get trained during the Fifth Plan. The Crafts to be covered are embroidery, carpet, namdha, crewal embroidery, wood carving, paper-machie, leather goods, cotton, bamboo crafts, kani shawls, carpet talim, writing and designing handloom, weaving and hosiery. Besides the above training programme, short term refresher courses will be arranged within and outside the State for educating the handicraft manufacturers in better management and production methods. Training-cum-study tours will be arranged for designers and master craftsmen. 20 master craftsmen will be trained each year within the country and 5 master craftsmen deputed to foreign countries.

Subsidy on Bank Interests

The workers of the handicraft industry are low wage earners compared to other categories of labour. This is mainly because they are exploited by middle man. In between the actual workers and the consumers two agencies are operating who appropriate major portion of the gains. These agencies are styling themselves as master craftsmen and big manufacturers-cum-

traders. The workers have to depend on these two agencies because of their limited financial resources. In order to help the workers to get rid of the clutches of the middlemen, arrangements have to be made for financing them so that they are in a position to produce goods and sell them direct to the consumers. It is, therefore, necessary to subsidize the interest liability on the loans to be borrowed by the workers from the banks for meeting their requirements of working capital for production of goods in which they are engaged. Each year at least 500 persons are expected to be benefitted by this scheme.

Advance for preparing Work Sheds

Most of the handicraft workers are at present living in slum areas. A scheme for construction of residential-cum-production complex for handicraft workers is separately under consideration. The scheme will not, however, benefit all the workers. It is, therefore, proposed to advance to the handicraft workers loan at simple interest of 4½% for repairing houses. The principle and the interest will be repayable in 120 monthly instalments.

The other schemes of the directorate relate to the improvement in craft techniques, participation in exhibitions, seminars and marketing, grant of awards and incentives etc. These programmes are expected to gradually help the handicraft industry.

Wood seasoning is a long felt need of the wood carving industry. This, among other things, help raising the quality of the goods of this industry, which at present has got temporary set back in foreign market. Use of seasoning wood for wood carving will, therefore, greatly help in

improving the quality of goods. With this in view, a wood seasoning centre in Srinagar will be set up.

Industrial Co-operatives

As a first step towards elimination of the middle man it will be necessary to organize the handicraft workers into co-operatives. At present there are 87 industrial co-operative societies with a membership of 5,500. All the members do not, however, have sufficient work. This has been mainly due to lack of financial assistance, non-availability of raw material and adequate marketing facilities. Keeping the past performance in view, proper financial assistance is proposed to be made available. Efforts will be made to strengthen potentially viable co-operative societies and provide employment to the waiting members. In addition 5,000 artisans will be brought into co-operative fold out of whom 2,300 will be new members and about 500 waiting members who will be provided employment during each year. 195 new societies will be set up.

To overcome the marketing difficulty of the Co-operative sector apex Marketing Federation will be set up. The main object of the Federation will be to arrange sale of the products of the Co-operative societies and procure raw material for the affiliated societies. This Federation, to begin with, will deal in wholesale and latter on, as and when, the supply position improves, shall have its own sale Depots. However, the sale Depots of the existing organisations (J&K Handloom Fabrics Marketing Societies, Kashmir Arts Co-operative and Jammu Industrial Co-operative Association) will be taken over by the Federation.

In order to augment the resources of the Federation and create a capital base

for it, the Government will contribute to the share capital of this Federation. This will enable the Federation to increase its borrowing capacity from the Banking Institution.

The total financial outlay for the co-operative sector is Rs. 52.25 lakhs. This includes share capital loan, managerial subsidy, loan for purchasing looms and equipment, share participation and subsidy on interest on the loan to be arranged from the financial institutions. Working capital provision has not been made in the Plan. The entire working capital for the industrial co-operatives as well as for the Federation, which amounts to nearly Rs. 184 lakhs shall be arranged from the financial institutions and as such subsidy on interest for the borrowing on account of working capital loan has been provided, which amounts to Rs. 5.00 lakhs for the entire period of the Plan.

Khadi and Village Industries Board

During the Fifth Plan the State Khadi and Village Industries Board will organize 800 more co-operative societies and provide financial assistance to 1,000 individuals. Funds for this purpose will be provided by All India Khadi and Village Industries Commission. For administering and supervising the programme, the State Board require to be strengthened for which purpose grant-in-aid of Rs. 6.00 lakhs will be provided to the Board, part of which will be required for running of the Bee Breeding Centres.

J & K Handicrafts (Sales & Export) Corporation Ltd.

An outlay of Rs. 35.00 lakhs has been included in the Plan for the Corporation. The main programmes to be taken up relate to production; training of personnel

and artisans, boosting of export sales by undertaking market studies, participation in foreign fairs, preparation of export catalogue production-wise etc.

The domestic sales of the handicraft goods are expected to reach to Rs. 6 crores and export sales to over Rs. 1 crore.

Sericulture

Sericulture is a traditional industry of the State and has a tremendous potential to improve the economic conditions of the rural population. It has had a glorious past in the State and at present it provides direct employment to 3,415 persons besides 33,000 families and silkworm rearers who practise sericulture as a subsidiary occupation.

The State is ideally suited for development of Sericulture. This is the major State in the country which produces uni-voltine silk comparable in its qualities to that of the imported silk. No doubt the production of raw silk in the country has increased from 690.5 M. Tonns in 1938 to 2,229 M. Tonns in 1971 but the country continues to be an importer of raw silk to meet the demand of the export needs of fabrics. This is so because out of 2,229 M. Tonns of raw silk produced in the country, the uni-voltine silk production is only about 50 tonns, the remaining being multivoltine silk, which is not acceptable in the international market. In spite of the great suitability and potential of the State for sericulture development, no substantial progress has so far been made in increasing the cocoon production despite heavy investments made so far. The droughts of the previous years have adversely effected the industry.

2. A close study of the existing potential for development however, leads one

to the conclusion that it should be easily possible for the State to step up production manifolds, if the impending factors and bottle-necks are removed and orderly development of the industry ensured. The impending factors in the orderly growth of the industry have been identified as under :—

- (a) poor quality of locally produced seed ;
- (b) poor quality of mulberry leaf ;
- (c) primitive methods of rearing and insufficient rearing accomodation.

The Central Silk Board has appointed a univoltine Development-Committee to make recommendations for the development of univoltine Sericulture.

The main recommendations of the said Committee are :—

- (1) Improvement of Mulberry by systematic pollarding and manuring.
- (2) Extensive plantations with the Co-operation of Forest, PWD and other State Departments.
- (3) Improvement in the quality of hybrid seed.
- (4) Installation of Model Grainages.
- (5) Evolution of more productive breeds.
- (6) Improvement in the rearing techniques.
- (7) Improvement in the rearing conditions and rearing accommodation.
- (8) Rationlisation of prices.

The 5th five year plan envisages removal of impending factors and a production target of 150 tonns of raw silk at the end of

the 5th Plan against the present level of production of 50 tonns, raising level of cocoon production to 0.50 lakh Mds. and seed to 0.60 lakh ounces. To achieve the objective following programmes of development for different sectors of industry will be undertaken. An outlay of Rs. 4.32 crores has been included in the Plan.

Mulberry Culture

20 lakhs Mulberry plants will be raised and steps taken to ensure a survival rate of 50% by planting these plants in suitability selected sites on canal banks, vacant Government lands and protected lands of reares. A net work of Mulberry nurseries is proposed to be established to increase the production of saplings and for introduction of Sericulture in new areas.

The cultivation of bush type Mulberry plantation will be taken up in 600 acres during the plan period to enable double cropping in Sericulture and increase the leaf capacity for rearing purposes.

With the implementation of this programme leaf capacity at the end of 5th Plan will increase by 20,000 ozs. bringing the total leaf capacity to 53,000 ozs. as against the present level of 33,000 ozs.

3. Silkworm Rearing

- (a) *Parent Seed Rearing*
- (b) *Multipurpose Farms*

The incubation-cum-chawki rearing technique practised here does not give the desired results due to the operational defects, these will be removed by construction of Departmental huts specially designed to suit this delicate operation in order to derive full advantage of the techniques of hte chawki rearing. Each building will have farm of 6.0 acres attached to it for providing leaf for Chowki rearing as also for conducting summer/autumn rearings for seed purposes. The Centre will also be used for crop taking, sorting sexing and

eeding purposes for which jobs the silk worm rearer will be employed and each rearer is expected to get an additional income per oz. of seed besides the cost of cocoons. The Centre will be fully utilized for full sericultural season for different jobs and hence will be called 'Multipurpose Sericulture Farms'. During the Plan period it is proposed to establish 15 such farms in the seed rearing zones in the State.

c) *Improvement in the rearing conditions*

Russian type Machan system of rearing will be taken up instead of floor rearing and improve the yield to 40.0 kgs. per oz. against the present level of 20.0 kgs. per oz. as the floor system of rearing is responsible for low yields. For this purpose financial assistance will be given to rearers. Besides, they will be given aid for purchase of cocoonages and other consumable material required for rearing in order to provide suitable conditions for silk worm rearing to increase the yield.

d) *Improvement in the rearing accommodation*

The inadequate rearing space of the rearers adversely affects the cocoons production per oz. of seed. Therefore it has been proposed that during 5th Plan 750 rearers will be given assistance for improvement of their rearing accommodation.

The scheme aiming at improvement of rearing of parent seed will enable the Deptt. to harvest quality seed cocoons which will have positive effects on the quality of the industrial seed.

B—*Industrial Seed Rearing*

This scheme also envisage establishment of departmental incubation centres where in the delicate technique of incubation and chawki rearing could be conducted under ideal conditions to enable to

take full advantage of this technique. During the 5th Plan period 45 Departmental incubation-cum-chawki rearing centres will be set up.

For increasing efficiency of rearing from 20 Kgs. per oz. to 40.0 Kgs. per oz. during the 5th Plan period it is proposed to change the floor system of rearing to Machan system. Rearers will be given assistance for erection of Machans.

With the implementation of the scheme productivity per oz. of seed is expected to increase to 40.0 Kgs. at the end of the 5th Plan.

Seed Production

(a) Parent Seed

The existing Basic Seed Stations are proposed to be provided with facilities which are lacking in these stations and their working rationalised and efficiency improved. 3 more units are proposed to be set up during the 5th Plan in order to produce the required quality of P1 seed needed for production of larger quantity of F1 seed.

(b) Industrial Seed

The demand of F1 seed at the end of the 5th plan is expected to increase to 55,000 ozs. In order to produce this quantity of seed locally of a high quality, the existing grainages will be remodelled, renovated and made more suitable for seed production work. For meeting the increased demand of F1 Seed, 5 more grainages will be established, on modern lines so as to achieve the qualitative and quantitative self-sufficiency in respect of F1 Seed.

The method of sex separation by cutting of cocoons will be amplified.

Trainings

During the 5th Plan activities of the

Training Institute are proposed to be amplified and programme of training of rearers besides staff implemented. It is proposed to provide necessary laboratory, and farm facilities to the institute in order to make the Institute more useful for the Industry.

Pilot Projects :

(Package programme for area development)

The idea of this scheme is to concentrate development efforts in a particular zone and improve its performance by 100% during the plan period. The area to be selected will have a rearing capacity of 1,000 ozs. and all the modern techniques will be utilised for increasing the yield of cocoons per oz. to 40.0 Kgs. against 20.0 Kgs. at present. The Pilot Projects will be composite units of Sericulture having all the activities from seed production to reeling of cocoons.

During the plan period it is proposed to establish 6 projects covering 6000 ozs. of seed.

Research

A full-fledged Research Station with its sub-station at Jammu will be established to tackle the day to day problems of the Industry and conduct experiments on evolution of new and more productive breeds of silkworm and mulberry suitable

for the State conditions. The station will also undertake work to evolve suitable hybrid combination for different regions of the State.

Creation of an agency for implementation of Plan Programme

For effective implementation and proper utilisation of resources it is necessary to create an implementing agency for development plans and co-ordination.

Physical Targets

The main physical targets set for the Fifth Plan are indicated below:—

Mulberry Culture

1. No. of mulberry trees to be planted (in lakh No.)	20.0
2. No. of nurseries to be set up	
3. Area to be brought under bush cultivation (in acres)	60
4. No. of trees to be pruned and manured (in lakhs)	2.1

Seed Production (in ozs.)

1. Production of parent seed	5,00
2. F. I. Seed	55,00
Cocoons production (in Mds.)	50,00
Raw Silk Production (in Kgs.)	1,50,00

Selected Physical target in Village and Small Scale Industries

Physical target			
4th Plan		5th Plan	
Target	Likely achievement	Target	
Small Scale Industries :			
1. No of new units likely to be established	2,000	2,200	5,000
2. No of additional employment likely to be created			600
a) For technically qualified persons	--	--	24,500
b) others	--	--	
Industrial Estates/Areas .			
1. No. of new estates/areas proposed to be developed	--	37 acres	250 acres
No of sheds			
a) urban areas	--	2	1
b) Semi-urban areas	--	1	35
c) Rural areas	--	3	
2. No of persons likely to be employed in-			
a) Construction activities		25,000 (both direct & indirect)	
b) Industrial activities			
i) Technical qualified persons			
ii) Others			200 units
3. Procurement of machinery	--	--	1000 -do-
4. Credit Facilities	--	--	650 persons
5. Training	1 (Lab)	1 (Lab)	3 (Lab)
6. Quality Control			
7. Handloom/Powerlooms			
i) Training	--	40 (flyshuttle)	500 (trainees)
ii) Supply of improved tools	--		1500 (flyshuttle)
Industrial Co operatives :			
1. Cooperative Societies	--	87	195 (New)
2. Membership		5,500	5,000 (New)
Handicrafts :			
1. Sales through Emporia Rs in lakhs	288.00	240.32	602.00
2. Exports (-do-)		30.60	117.00
3. No of persons likely to be provided with			
a) Fuller employment		4,000	7,000
b) New Employment	--	669.44	1282.50
4. Exports through private trade (Rs in lakhs)			
Sericulture :			
1. Production : -		28,000	60,000
a) Seed (ozs)		26,667	50,000
b) Cocoons (Mds)	60	79,000	1,50,000
c) Raw Silk (Kgs)			
2. Export (Rs. in lakhs)		3,415 (Dir)	1,200 (Addl. Dir)
3. Total No. of persons Employed -		33,000 (Dir)	20,000 (Addl. Dir)
a) Direct			
b) Indirect			

SCHEMEWISE OUTLAY FOR THE 5TH PLAN

VILLAGE & SMALL SCALE INDUSTRIES

		(Rs. in lakhs)		
		5th Plan approved outly		
S. No.	Head/Sub-head/Scheme	Total	Capital	Foreign Exchange
1	2	3	4	5
SERICULTURE				
I. Kashmir				
1.	Mulbary Culture	432.00	110.00	1.50
2.	Basic Seed Organisation			
3.	F. I. Seed Production			
4.	Incubation cum-Chowki raring cum Pl seed establishment of Multipurpose farms improvement in the rearing condition in Pl rearers.			
5.	Incubation of FI Seed improvement in the rearing of FI Seed.			
6.	Sericulture Training Institute.			
7.	Establishment of Pilot Project.			
Jammu				
1.	Mulbury Culture	432.00	110.00	1.50
2.	Basic Seed Organisation			
3.	Rearing of PI Seed by selected rearers, establishment of multipurpose farms. Improvement in the rearing conditions and accommodation			
4.	Production of FI Seed			
5.	Incubation cum-Chowki rearing of FI seed and improve-ment of the rearing conditions.			
6.	Tussar Pilot Project			
7.	Establishment of Polit Project			
State Level Schemes				
1.	Reserach Organisation	432.00	110.00	1.50
2.	Advisor's office			
Total I :		432.00	110.00	1.50
II. KHADI AND VILLAGE INDUSTRIES BOAD				
1.	Establishment including Rent, TA and other charges	5.56	..	..
2.	Bee Breeding Sub-Centre	0.44	..	..
Total II :		6.00	...	..
III. J AND K HANDICRAFTS (S AND E) CORP. LTD.				
1.	Establishment of Library of Samples (cost of samples & Designs)	2.00	2.00	..
2.	Expansion of Carpet Production Centre	10.00	10.00	..
3.	Training of production and sales personnel	3.50	3.50	..
4.	Apprenticeship course of wastakers, weavers designs etc.	5.00	5.00	..
5.	Market Studies and teams	3.00	3.00	0.50
6.	Participation in Foreign Exhibition	10.00	10.00	0.50
7.	Preparation of export catalogue Production	1.50	..	..
Total III :		35.00	35.00	1.00

STATEMENT
(Rs. in lakhs)

S.No.	Head/Sub-head/Scheme	5th plan approve outlay				
		Total	Capital	F. E.		
	2	3	4	5	6	7
IV. Schemes of Directorate of Handicrafts						
			10.00		..	..
1.	Strengthening of Directorate					
2.	Training cum study tours in the country and abroad		5.00		..	1.50
	of designs master craftsmen					
3.	Subsidy on Bank interest towards Banking		5.00		..	..
	institutions		1.25		..	..
4.	Improvement of Craft Technique		2.50		.	0.50
5.	Exhibition & Seminars		1.00		-	
6.	Awards and incentives		2.00		.	..
7.	Wool Seasing plant		9.00		9.00	-
8.	Repairs to work sheds		52.25		40.00	.
9.	Induscos		97.50		..	..
10.	Training for Artisons				..	..
11.	Training for management and business refreshment		2.50		..	..
	course		6.00		..	..
12.	Expansion of School Designs		5.00		..	..
13.	Market Surveys & Studies					
Total IV :			200.00		49.00	2.00

V. Schemes of Director Industries & Commerce

	35.00	35.00	..
1. Development of Industrial Estates	20.00	20.00	..
2. Raw Material Procurement	10.00	10.00	..
3. Procurement of Machinery on hire purchase	8.20	..	..
basis	16.00	..	..
4. Credit Facilities	14.00	..	..
5. Trainings	9.00	9.00	..
6. Organisation Assistance	10.00	..	..
7. Quality Control	86.00	..	..
8. Publication/publicity Seminars			
9. Other facilities to SSI			
Hand looms and power looms			
	9.44	..	..
1. Raw material	3.00	..	..
2. Training centres	1.36	..	..
3. Design Development	5.00	5.00	..
4. Supply of improved tools			
Total V		227.00	79.00

Grand total (Villages & Small Scale Industries)

900.00 273.80 4.50

4. Mineral Development

Development of mineral resources and utilisation of various industrial rocks is related to the industrial growth of the State. A beginning has already been made towards exploration of the mineral deposits and their utilisation. A Cement Factory in Srinagar based on the available mineral resources providing necessary raw material to it has been set up. A thermal power house has been constructed in Kalakote which is using the coal available in the Kalakote belt. The lignite available in Nichhama and other areas is being mined and utilised as fuel. For detailed exploration and proving of the mineral resources and establishing their commercial utilisation the department of Geology and Mining already exists in the State. The actual utilisation of the minerals for setting up such factories as can be fed on these minerals, is entrusted to the J & K Minerals Ltd. which is a State Government Undertaking.

During the 4th Plan the Directorate of Geology and Mining continued exploration of mineral deposits aimed at assessing the reserves and grades particularly for coal, lignite, base-metal, lime-stone, gypsum, bauxite, precious and semi-precious stones and other minerals. Ground water exploration and tendering geological advice to engineering projects continued to remain other spheres of activity of the Directorate. Administration of Mineral Concession Rules is another important function of the Directorate. The work on an overall basis Comprised investigations relating to the following minerals:-

(1) Detailed investigation, through

pitting, trenching, exploratory mining and drilling, for coal at Ransu Chakkar and Jangalgali. The assignment are directly related to providing of reserves, for Thermal Power Station and also cater to the increasing demands of brick-kilns.

(2) Detailed investigations through exploratory mining, sampling and drilling continued at Ganga, Assar and Kourapani blocks of Batote-Assar Gypsum deposits. The detailed investigation has resulted in proving of good quality gypsum deposits which are being used for reducing alkalinity of soil and for manufacture of surgical grade plaster of Paris and plaster crayens.

(3) After proving the quality and quantity of Banjalgala limestone in connection with Basohli Cement Project detailed investigation of the Siara limestone deposits has been taken up for proving additional reserves for the cement plant. The Siara deposits appear to be of a grade slightly better than Banjalgala deposits. The work is being carried out by pitting, trenching, sampling and exploratory mining.

(4) Detailed investigation of Khrew limestone for Kashmir Cement Project and for precipitated chalk Project have recently been taken up. The pre-investment geological studies are being given priority at Khrew and work is being carried

out through detailed mapping, sampling, drilling etc.

- (5) Investigations of Non-ferrous metals at Buniyar, Shumhal, Lashtial in Kashmir Vally, Sairsandhu in Jammu and Zaskar in Ladakh are also in hand. Promising mineralised zone has been encountered at Hapatnar, Narkasbi and Pathra blocks at Buniyar. At Shumhal and Lashtial, sulphide mineral's action mainly in the form of Chalcopyrite (and arsenopyrite) has been observed and work through programme of drilling, regional geological mapping, exploratory mining is under way. At Sairandhu the work comprises clearing of old aridits and workings preparation of sub-surface geological maps and collection of samples.

The investigations pertaining to the following minerals were also carried on :—

Graphite of Kishtwar and Marble of Thathri; Bentonite of Purmandal; Base-metal mineralisation in Panjal Trap near Watlab; Rock Phosphate/Phosphrite of Kashmir Valley, Magnesite in Ladakh and research and developmet work relating to bauxite, lignite and quartzite.

The physical targets set for 4th Five Year Plan, and the achievements anticipated to be made up to the end of the Plan, are indicated below :—

S. No	Item	Unit	Target	Anticipated achievement
1.	Drilling	Metres	41,148	17,370
2.	Explotatory Mining	-do-	2,133	4,102
3.	Geological mapping (Detailed)	Million Sq. feet	75	26.5
4.	Geological mapping (reconnaissance)	Kms.	2,500	1,570
5.	Samples	Nos.	32,000	5,188 (analysed)

There are some critical areas of deficiency particularly in equipment, mining personnel and laboratory facilities for physical and chemical testing of industrial rocks and minerals. Steps will be taken to overcome these difficulties in the years to come. The State Geology and Mining Department has Undertaken a programme of exploration of groundwater at various places in the State and is maintaining liaison with various departments of the State Government and the Central Groundwater Board in order to achieve better efficiency in the work.

The J & K Minerals Ltd. are mining the coal reserves in Kalakote region at the rate of 40,000 tonnes which is supplied to the Kalakote Thermal Power Station. It is also mining the lignite deposits in Nichhama. A briquetting factory based on the lignite as raw material has already come up on a pilot basis. The Corporation is also collecting Sapphire cordums.

5th Plan

In the 5th plan an outlay of Rs. 4.25 crores has been included out of which Rs. 25.00 lakhs has been earmarked for the J & K Minerals Ltd. and the balance amount of Rs. 400.00 lakhs for the Directorate of Geology & Mining.

Brief description of the work to be undertaken is indicated below :—

J & K Minerals Ltd.

In order to meet the requirements of the coal for the operating second unit of the Thermal Power Station Kalakote, mining of coal in the Kalakote belt has to be stteped up to 70,000 tonnes per annum. According to the preliminary exploration studies made, the beneficial reserves are estimated at 2-3 million tonnes of coal in Kalakote area. For meeting the increasing requirements, it is proposed to raise the production capacity of coal to 80,000 ton-

es per annum. Expansion in the production capacity of the mines is expected to reduce the cost of coal. It is also proposed to intensify the activities connected with exploration of reserves and collection of apatite.

Directorate of Geology and Mining

The Directorate of Geology and Mining is to take up in a big way exploration of various minerals deposits and occurrence of industrial rocks and intensify its activities for achieving the objective. Such parts of the State as are less developed and have hitherto been uncovered are also proposed to be covered in the 5th Plan. Intensification in the minerals investigation work and large scale expansion of the activity call for adequate infrastructure facilities such as road communication and better transport system and availability of power, technological studies, research and development. It is also necessary to provide facilities such as establishment of nucleus cells for conducting geo-chemical, geo-physical explorations and for developing modest photo interpretation. Additional equipment such as rigs and transport vehicles will also be required.

On the basis of the assessment made regarding possibilities of setting up of mineral based industries in the State, it is proposed to take up exploration of the following minerals in the 5th Plan.

Name of the Mineral	Name of the Industry for which it can be utilised
1. Gypsum	1. Sulphur, Sulphuric Acid. 2. Fertiliser 3. Cement 4. Gypsum Boards for Construction works.
2. Lime stone	1. Cement 2. Precipitated Chalk 3. Soda Ash 4. Calcium Carbide.

3. Bauxite

4. High grade quartzite.

5. Lignite

6. Coal

1. Industrial Alum
2. Refractories
2. Crystal Glass
2. Sheet Glass
3. Bottle Glass
4. Goggle Glass
5. Sodium Silicate
6. Refractories.
1. Fuel
2. Fertilizer

Fuel etc.

While in the interest of continuity, some of the projects at present, under operation will be continued in the 5th Plan, emphasis is proposed to be laid on such projects as are likely to yield tangible results in the foreseeable future. Taking into view the long and short term objectives of the industrial growth and the present status of the knowledge of various mineral resources, it would be necessary to attach importance to the programmes connected with assessment of mineral resources in particular gypsum, limestone, coal, lignite, bauxite, sulphur, borax and quartzite. Intensification of exploratory work of these mineral deposits will be necessary for formulation of detailed projects for working of the mines. Investigations for exploring and proving of the deposits of industrial rocks and other minerals required for establishing small industrial units will also be taken up.

Investigations proposed to be done have been grouped into three different categories depending on the three normally established stages of exploration of mineral deposits. These are aimed at progressive intensification of the quantum of physical exploration with a view to maximising the degree of dependability and reliability of the estimation of reserves of minerals and their mineability. The programme of exploration is indicated below:

A-Mineral Investigation Stage III programme

Pre-investment. investigation for limestone, Gypsum, Bauxite, Aluminium silicates, quartzite/Glass making material, Sulphur and Borax in Ladakh Lignite and subject to availability of funds (Rs.13 00 lakhs) Paddar Sapphire and Kalakote Coal.

State II Programme

Graphite, Ochre, Marble, Barytes, Steatites, China clay, coal (Jammu) Bentonite and Fuller earth, Quartzite of Fatla hills (Poonch) Non-ferrous metals (Lead-zinc and copper etc) in Lolab and Hapatnar Valley.

Stage I programme

(1) Ladakh Region preliminary investigation for Magnesite, Gold, Yellow ochre, Carbonate base metal mineralisation, garnet and ornament, Nickel, Cobalt and Chromite, Hot springs of Nubra Valley, Bentonite and other investigation.

(ii) Kashmir & Jammu Regions Abrasives and phosphorites, Granites in Kashmir, Geo-Chemical investigations for base metals, Sulphide, mineralisation in great limestone, iron ore, Numulitic limestone, graphite of Paddar, Search for other minerals in Kishtwar (in Jammu).

B. Groundwater

i/ Geo-hydrological investigation including collection of aquifer characteristics and well performance and allied related.

ii/ Exploitation oriented exploratory drilling.

(c) Ge-Technical Studies

i/ Surface, geological investigation for tendering advice for engineering projects.

ii/ Exploratory Drillings

(d) Setting of Geo-Chemical, Geophysical Laboratories.

To meet the requirements of J & K Minerals Ltd. for the finalisation of Techno-economic feasibility and formulation of firm project proposals.

To collect required data to establish suitability of utilization in mineral industry and also to explore need for further work.

To collect basic information about the potentialities of the reported and possible occurrences for formulating programmes of further exploration, if warranted.

To collect the basic information about the potentialities of the reported and possible occurrences for formulating programmes of further exploration, if warranted.

To assess groundwater worthiness of selected basins in Jammu and Kashmir.

To collect sub surface data about aquifer and to develop the wells wherever feasible.

To collect relevant data to help designing of engineering structures based on geological set up.

—do— (sub-surface exploration)

To provide modern facilities for exploration.

The target of physical quantum of work set for the 5th Plan is shown below:

Type of Investigation	Drilling (in Mts)	Expl. Mining (in Mts)	Detailed Geologi- cal mapp- ing (in Sq Mts.)	Recomain- sance geological mapping ex- cluding geological Survey (Sq Kms.	Sample in Nos.
1. Mineral investigation	2,000	3,200	76	32,00	32,000
2. Groundwater investigation	11,200	..	..	..	..
3. Engineering Geology	3,200	..	..	..	..
Total	16,400	3,200	76	3,200	32,000

SCHEMEWISE OUTLAY FOR THE 5TH PLAN (Mineral Development)

(Rs. in Lakhs)

S. No.	Head/Sub-head-Scheme	Total estimated cost	Anti. Expd. ending 4th Plan	5th outlay Total	plan Eap.	approved F. E.	
1	2	3	4	5	6	7	
1. Schemes of J and K Minerals Ltd.							
	Coal and Sapphire	41.00	16.00	25.00	25.00	—	
2. Schemes of Directorate of Geology and Mining							
	Intensive Minerals Investiga- tion Schemes including ground-water.	..	—	400.00	131.00	5.00	
	Total Mineral Development						
	(1 and 2)	..	41.00	16.00	425.00	156.00	5.00

Chapter IX

Roads & Transport

I. Roads

The need for an efficient road system in a State like ours is obvious. Excepting a small stretch of 66 miles of rail link in Jammu region, roads continue to be the only and the sole means of communications and will in fact continue to be so for some decades. No inland mechanised water transport system exists in the State. The growth of Sectors like Agriculture, Horticulture, Forests, Industries etc. is not possible without an up to date and adequate system of communications. Roads are thus an important part of the productive infrastructure.

2. Notwithstanding the significant progress made in road construction in the previous plan periods, the hinterland of the State has yet to be opened up and remains mostly inaccessible. A large number of villages have to be provided with roads. As many as 223 villages with a population of even 1,000 and above will be without a road connection at the end of the Fourth Plan. The number of villages with lesser population density without roads is greater.

3. The difficult topography of the State for obvious reasons, involves higher in-

vestment in road construction, especially in the hitherto unexplored and backward areas and so does the improvement and upgrading of the existing roads. The State requires colossal sums of money for opening up of its hinterland. Though the expenditure on roads has risen steadily during the last three plan periods from Rs. 259.39 lacs in the 1st Plan to Rs. 464.37 lacs in the Second Plan and to Rs. 979.69 lakhs in the Third Plan, the investment on this sector has not been found adequate to achieve the goal. Even with the further investment during three Annual Plan periods of 1966 to 1969, the position has not materially changed, so much so that the intensity of roads of all descriptions was 4.6 Kms per hundred square Kms against the all India average of 10.00 Kms of surfaced roads per hundred square Kms at the beginning of the IV Plan (1st April, 1969).

4. The approved IV Plan ceiling for Road Development in the State was Rs. 2,091 lacs including provision for establishment of Mechanical Workshop for the maintenance of road construction machinery equipment. This represents 13.2% of the total IV Plan Outlay of Rs. 158.40

crores. Against this, the actual utilisation during the first four years of the IV Plan was Rs. 1,630 lacs and by the end of the IV Plan (i. e. 1973-74) it is expected to be of the order of Rs. 2,099.15 lacs. Thus financial target set for the IV Plan period will have been exceeded by a margin of Rs. 8.15 lacs.

Level of Achievement

Against the IV Plan target of 6,645 kms the anticipated achievements by the end of the IV Plan will be :—

	surfaced	unsurfaced	Total
Kashmir	2903	963	3866 kms
Jammu	1906	993	2899 kms
	————	————	————
	4809	1956	6765 kms
	————	————	————

To sum up, the target for the IV Plan shall be exceeded both in financial and physical terms.

Fifth Plan General

An outlay of Rs. 38.50 crores is proposed for road development during the Fifth Plan. The main programmes are discussed below :—

(a) On-going Schemes

The first priority has been given to expeditious completion of spill over schemes from IV Plan. Almost all our on-going schemes are at such stage of construction that it would not be desirable from economic and other considerations to defer these. The outlay for these spill over works is Rs. 1,472.95 lacs. The region-wise detail is

as under :—

Kashmir	727.95 lacs
Jammu	745.00 lacs
	————
Total	1,472.95 lacs

This works out to 38.25% of the total allocation of Rs. 3,850 lacs. It is imperative that the pace of progress on these works is accelerated so that full benefits accrue from these as quickly as possible. This leaves a small provision of Rs. 2,377.45 lacs for new schemes for the entire V Plan period, including establishment and other miscellaneous charges.

New Schemes

For new schemes priority has to be given to correcting the deficiencies in the existing communication system in the State by providing missing links, missing bridges on important river crossings etc. But within the available limited ceiling of Rs. 38.50 crores these deficiencies cannot be made up. Roads built during the previous plan periods were constructed for lower specifications and consequently with the increase in traffic intensity almost all the roads need strengthening of pavements, remodelling/reconstruction of bridges and culverts and in certain cases widening of pavements to two lane width. Provision has been made for correcting these deficiencies as far as possible.

Special consideration has been given to the construction of roads in Hilly and Backward areas of the State. Rs. 255.56 lacs in Kashmir and Rs. 317.72 lacs in Jammu (total Rs. 573.28 lacs) have been indicated for on-going and other schemes in the said areas. This provision accounts for 14.9% of the total proposed outlay on roads.

Basic Minimum Needs Programme Rural Roads

Rural roads are vital for the development of our economy as over 80% of our population resides in villages. The total number of villages with a population of 1,000 and above in the State is 1,017 (488 in Jammu and 529 in Kashmir Division). Out of these 771 villages are expected to be connected by the end of the Fourth Plan. In Jammu Division 23 villages will be connected during the Fifth Plan period. This would leave 223 villages (192 villages in Jammu and 31 villages in Kashmir) yet to be connected by roads under the Minimum Needs programme. 79 of these villages are proposed to be connected by roads (26 in Kashmir and 53 in Jammu Division) during the Fifth Plan.

The road plan in the State is essentially a plan for construction of rural roads. This is evident from the fact that out of the proposed allocation for Kashmir region rural roads account for Rs. 16.56 crores or 86% of the total outlay. Similar is the case with Jammu region.

District-Wise break up of the allocation

Kashmir Region

(Rs. in lacs)

1. Anantnag	637.22
2. Srinagar	517.46
3. Baramulla	523.16
4. Central Road Fund	10.00
5. Establishment, Surveys, etc.	237.16
Total	1925.00

Jammu Region

(Rs. in lacs)

1. Jammu	392.95
2. Kathua	284.84
3. Udhampur	332.43
4. Doda	338.42
5. Rajouri-Poonch	366.36
6. Central Road Fund	10.00
7. Establishment, Surveys, etc.	200.00
Total	1925.00

Level of achievements at the end of V Plan

The total length of roads at the end of V Plan is targeted as under :—

	Sur- faced	Un- surfaced	Total
Kashmir	3844	807	4651
Jammu	2216	1403	3619
Total	6060	2210	8270

The population and the area of the State (excluding Ladakh District and the area under Pakistan) is 45.12 lacs and 42,000 sq. kms. respectively as per 1971 census. The intensity of roads per 1,000 population will thus be 1.83 kms. (and 19.69 kms per 100 sq. kms. at the end of the Fourth Plan). Other States like Haryana, Kerala, Mysore, Punjab, Tamil Nadu and West Bengal etc. have exceeded this level of achievement in respect of surfaced road length per 100 kms. even at the very commencement of the IV Plan (1st April, 1969). The figures in respect of these States were 14, 50, 20, 16, 33 and 18 respectively. Thus this State very much lags behind other States.

Employment potential

The employment potential that is likely to be generated during the Fifth Plan under the Road Development programme with the above investment is estimated as under:—

<i>Lakh man Days</i>			
	<i>Kashmir</i>	<i>Jammu</i>	<i>Total</i>
1. Skilled	12.22	12.00	24.22
2. Un-skilled	97.05	100.00	197.05
Total	109.27	112.00	221.27

Requirements of scarce materials

The requirements of the essential road

building materials are estimated as under:—

(Figures in tonnes)

	<i>Kashmir</i>	<i>Jammu</i>	<i>Total</i>
1. Steel	11,600	15,000	26,600
2. Cement	37,200	1,50,000	1,87,200
3. Bitumen	15,200	10,000	25,200

Central Road Fund

A provision of Rs. 20.00 lakhs has been made as the State Government's share for construction of roads under Central Road Fund Ordinary reserve.

FIFTH PLAN 1974-79

Roads and Buildings

(Rs. in lakhs)

Name of District	Spill over schemes	New schemes	Min. Needs Programme	Total
	5th plan	5th plan	5th plan	5th plan
2	3	4	5	6
Kashmir Province :				
1. Anantnag	352.96	154.11	130.15	637.22
2. Srinagar	154.91	241.45	121.10	517.46
3. Baramulla	220.08	154.27	148.81	523.16
TOTAL	727.95	549.83	400.06	1677.84
4. Common Items				
i) P. W. Buildings .. ..	..	..	..	5.00
ii) Establishment .. ..	..	..	..	150.00
iii) Heavy T & P .. ..	..	..	..	25.00
iv) Surveys including Survey units .. ..	..	..	..	10.00
v) M. G. Railways .. ..	..	..	..	2.16
vi) Road Research Laboratory .. ..	..	..	..	5.00
vii) Mech. & Stores Deptt. .. ..	..	..	..	50.00
TOTAL Kashmir .. ..	..	..	..	1925.00
Roads in specially Backward Areas (Kashmir)				
Total estimated cost	Anticipated expenditure ending IV Plan	Outlay for 5th Plan		
Rs. 84.27 lakhs	Rs. 1.54 lakhs	Rs. 82.73 lakhs		
	Spill over	New schemes	Min. Needs prog.	Total 5th plan
Jammu Province :				
1. Jammu	142.31	191.43	59.21	392.95
2. Kathua	214.42	53.70	16.72	284.84
3. Udhampur	77.35	74.76	180.32	332.43
4. Doda	221.27	117.15	..	338.42
5. Poonch	18.69	25.78	83.48	127.95
6. Rajouri	71.60	106.49	60.32	338.41
7. Roads under C.R. Fund (State Share)	10.00	..	..	10.00
TOTAL Works	755.64	569.31	400.05	1,725.00
8. Miscellaneous i. e. Surveys, investigation, etc. .. ..	..	..	..	200.00
TOTAL Jammu	755.64	569.31	400.05	1925.00

KASHMIR ROADS AND BRIDGES

Fifth Plan (1974-79)

Schematic Breakup of Outlay

(Rs. in lakhs)

S. No.	Head/sub-head/scheme	Total estimated cost	Anticipated exp. ending 4th Plan	5th Plan approved outlay	
				Total	Capital
1	2	3	4	5	6
I. SRINAGAR DISTRICT					
(A) Works in progress					
(a) Improvement to low grade section (upgrading)					
1.	Upgrading Bagroo Khan-Sahib Road 5 KM. BT. ..	2.00	1.75	0.25	0.25
2.	Upgrading Pampore Lasjan Road Remetalling and shell sheeting 12 KM. BT ..	5.42	2.10	3.32	3.32
3.	Upgrading Chattergul Kultreh road 5.5 KM. BT. ..	2.35	0.70	1.65	1.65
4.	Upgrading Badgam Zalapora Kremshore road 13 KM. MT ..	5.00	0.68	4.32	4.32
5.	Upgrading Aripant Khan Khag road 10 KM. BT ..	4.06	1.18	2.88	2.88
6.	Upgrading Ompora Narkara road and its extension upto Barzalla 7 KM BT ..	9.22	0.15	4.50	4.50
7.	Upgrading Sephdan Warpora road 3 KM. MT ..	0.92	0.51	0.41	0.41
8.	Upgrading Nagbal Batapora road 6.5 KM BT ..	3.30	1.35	1.95	1.95
9.	Upgrading Chodra Surasyar road 13.5 KM. BT ..	10.22	2.90	7.32	7.32
10.	Shingling Aripant Khan Lolipora via Iskanderpora road 8.5 KM SH ..	3.00	1.13	1.87	1.87
11.	Remetalling and Surfacing Natipora Neu road ..	5.63	5.59	0.04	0.04
12.	Soling and metaling Narbal Soibug road ..	4.42	3.22	1.20	1.20
13.	Upgrading Internal roads at Natipora ..	1.15	0.15	1.00	1.00
TOTAL (Upgrading)		56.69	21.41	30.71	30.71

1	2	3	4	5	6
(b) Roads in Hilly and Backward Areas					
<i>i Major District roads.</i>					
1. Widening Charisharief Yus road 17.7 KM ..	2.63	0.50	2.13	2.13	
<i>ii) Rural Roads</i>					
1. Haproo Nilnag road 6 KM SH ..	3.26	1.78	1.48	1.48	
2. Lar Chaantiwaliwar road 5.5 KM SH ..	5.36	0.26	5.10	5.10	
3. Const. of Arizal Palmaidan Yus road 20 KM FW	15.85	2.46	4.50	4.50	
4. Mirgund Waterhail Naslapora road 9.5 M ..	7.90	5.90	2.00	2.00	
5. Raithan Palmaidan road 8.00 KM FW ..	5.85	2.32	3.53	3.53	
6. Road from Kachnmbai to Wangat (Prant to Kachgund) 8 KM FW	5.17	1.30	3.87	3.87	
7. Khag to Gogaldara Pushkar road 4 KM FW..	3.10	1.91	1.19	1.19	
8. Badgam Parnewa road to Parnewa village 8 KM SH ..	2.4	1.58	0.90	0.90	
9. Road from Raithan to Riyariyach (Kralpathri) via Lathapora 8 KH FW	7.41	0.60	4.50	4.50	
10. Road from Lolipora to Khag via Kulipora Malapora 5.6 KM SH ..	3.55	0.16	3.39	3.39	
11. Road from Kakaw ring to Charawri 3.5 KM SH	2.43	0.71	1.72	1.72	
12. Sonmarg Thajiwas road 3 KM ST ..	3.50	1.08	2.42	2.42	
TOTAL b (i.e. 1 to 12)	65.86	20.06	34.60	34.60	
TOTAL (Hilly and Backward Areas Roads) ..	68.49	20.56	36.73	36.73	

(C) Major District Roads.

1. Approach road connecting Chattabal bridge Ganderbal Sonmarg road	5.88	0.91	4.97	4.97
2. Development of Badgam road 6.5 KM BT ..	11.94	6.50	5.44	5.44
3. Kangan Wangat road	4.23	3.62	0.61	0.61
TOTAL (Major District Roads)	22.05	11.03	11.02	11.02

1	2	3	4	5	6
(d) Other Rural Roads.					
1. Soling and metalling Soibug Sonpah road 12 KM MT ..	4.97	1.02	3.95	3.95	
2. Gopalpora Gussu road 11 KM FW ..	5.39	1.21	4.18	4.18	
3. Const. of Harwan Darbag Mulfaq Chandpora road 3 KM MT ..	4.25	1.65	2.60	2.60	
4. Noorbagh Palpora Gundroshan road 16.5 KM	5.69	5.00	0.69	0.69	
5. Road from Chodra to Khanda 7.5 KM FW	3.49	0.75	2.74	2.74	
6. Road from Kultrah to Khanpora 6 KM FW	1.30	0.33	0.97	0.97	
7. Road from Kanihama to Samerbug (extension and improvements) 3 KM FW ..	2.19	0.40	1.79	1.79	
8. Road from Watamagam to Peth Kanihama 2.5 KMFW ..	6.56	0.35	6.21	6.21	
9. Link road from Wadwan to Bandgam to Beru 2.5 KM SH ..	1.80	0.73	1.07	1.07	
10. Road from Wathora to Chattergam via Doniwara 3.5 KM FW ..	1.46	0.66	0.80	0.80	
11. Link road from Nuner to Palsal 2.5 KM M ..	1.98	0.28	1.70	1.70	
12. Metropolitan roads ..	9.13	4.73	4.40	4.40	
13. Remodelling work bridges and culverts on Parimpura Soibug road ..	2.57	0.59	1.98	1.98	
14. Road from Morind Darbagh to Saidpora Bala 1 KMBT	1.10	0.55	0.55	0.55	
15. Badgam Handjan Maimat road. 8 KM. FW ..	8.38	0.71	7.67	7.67	
16. Road from Hyderpora to Gurteng via Gulwanpora 2 KM. SH. ..	1.36	0.18	1.18	1.18	
17. Link road to Chundana village 2.75 KM. SH	2.11	0.31	1.80	1.80	
18. Road from Rapore to Zuhama Khiter Gund 6 KM. M ..	5.40	0.25	5.15	5.15	
19. Road from Pampore to Maze. 2.50 KM. FW	1.20	0.07	0.95	0.95	
20. Road from Hayatpora to Woybug via Qazipora. 4.5 KM. GFW ..	2.80	0.11	2.69	2.69	

2	3	4	5	6
Kandhama Palpora road.	1.84	0.88	0.96	0.96
Nagam Chrawani Tilsar Road 15 KM. FW ..	2.00	1.48	0.52	0.52
Konibal Wuyan road. 3.5 KM. BT ..	2.75	1.53	1.22	1.22
Coast of Khanyar Zadi- bal Pandach road 12 KMBT	10.57	9.07	1.50	1.50
Link road to Likhripora 2.5 KM. FW ..	1.31	0.21	1.10	1.10
Neu Hayatpora road. 5.5KM. FW ..	1.21	0.22	0.99	0.99
Road from Kandhama to Abur viz Bamrood 2.75 KM. SE ..	2.43	0.93	1.50	1.50
Road from Jawahar Nagar to Pampore viz Lasjan Phase I ..	5.39	2.18	3.21	3.21
Road from Naslapora Garind Wadwan. ..	2.11	1.03	1.08	1.08
Kremshore Zallapora via Kothwar road. ..	6.30	5.12	1.18	1.18
Hanjura Kaner road. ..	2.02	1.85	0.17	0.17
Khrew Bathind road. ..	1.68	1.39	0.29	0.29
Link road to Hussipora.	2.00	0.22	1.78	1.78
Natipora Pampore (kadlabal Gangipora sector) ..	2.77	1.34	1.43	1.43
Aripanthan to Loolipora via Iskanderpora. ..	5.68	4.22	1.46	1.46
Road from Khag to Drang	4.14	2.77	1.37	1.37
Link road to village Habak 1KM. SH ..	0.49	0.12	0.37	0.37
Pucea road to Kashipora	0.72	0.05	0.67	0.67
Link road connection Wantkawan Hafizbagh via Bhagat shera. ..	0.92	0.49	0.43	0.43
Const of road from Beru Chevadara to Chevedara village	0.51	0.35	0.16	0.16
Road from Repore to Namthal ..	0.69	0.42	0.27	0.27
Road from dadi Nawbug to Gulabagh. ..	0.48	0.33	0.15	0.15
Road from Nawgam to Padshahibagh. ..	0.32	0.15	0.17	0.17
Road from Methan to Naugam. ..	0.59	0.21	0.38	0.38
Link road from Magam Beru to Paripora via Adina.	0.70	0.30	0.40	0.40

1	2	3	4	5	6
46.	Link road from Magam Beru to Warahama. ..	0.36	0.12	0.24	0.24
47.	Improvement to link road from Rawalpura to Asthan- pora. ..	0.27	0.10	0.17	0.17
48.	Upgrading side drains and Construction of side drains in Rambagh area. ..	0.41	0.20	0.21	0.21
TOTAL (Other Rural Roads)		133.61	57.16	76.45	76.45
TOTAL (Works in Progress) in Srinagar District ..		280.84	110.16	154.91	154.91
(B) New Works in Srinagar Distt.					
(a)	Minimum Needs Programme	N.A.	..	121.10	121.10
(b)	Other Works ..	N.A.	..	241.45	241.45
TOTAL (New Works Sri- nagar Distt:)		N.A.	..	362.55	362.55
TOTAL (Works in Sringar Distt: ..		280.84(6)	110.16	517.46	517.46

II. ANANTNAG DISTRICT.

(A) Works in Progress.

(A) Improvement to low grade sections (upgrading).

1.	Extension and upgrading of Trogam Lamar road upto Brinal BT. ..	3.44	0.60	2.84	2.84
2.	Upgrading Rajpora Keller road 14 KM BT ..	5.68	1.50	4.18	4.18
3.	Upgrading Navnaz Tahab road via Watchi 16 KM BT ..	8.00	1.70	6.30	6.30
4.	Upgrading Damhal Narbal Road SH ..	1.18	0.63	0.55	0.55
5.	Upgrading of Qazigund Kulgam road 16.5 KMBT	8.00	1.45	6.55	6.55
6.	Upgradig Verinag Kaprin road 14.5KM BT	5.56	2.20	3.36	3.36
7.	Upgrading Doru Qazi- gund road 3.5 MT..	1.66	0.88	0.78	0.78
8.	Remetalling and black topping Okura Nanii Kanilwan road 7 KM MT	3.38	1.10	2.28	2.28
9.	Upgrading Dialgam Ha- kura Badasgam road 9 KM BT ..	9.33	2.30	7.03	7.03

1	2	3	4	5	6
10.	Upgrading of road from Nowgam to Indu via Kuthar 8 KM SH ..	1.61	0.35	1.26	1.26
11.	Upgrading Dessu Larnoo Iahanwan road 17 KM MT ..	2.78	0.70	2.08	2.08
12.	Metalling Bijbehara Wagahama Marhama Sangam road 8 KM MT ..	1.50	1.35	0.15	0.15
13.	Upgrading Doru Lisser Takia road 8.3 KM BT ..	6.00	4.10	1.90	1.90
14.	Upgrading Valloo Ahlan Gadole road 6.4 KM BT ..	2.50	0.74	1.76	1.76
15.	Upgrading Seer Hapatnar Aishmuqam road 21 KM BT ..	9.15	2.25	6.90	6.90
16.	Improvement and up-grading internal roads at Shopian 3 KM BT ..	3.21	1.09	2.12	2.12
17.	Upgrading of Kanjikuhi Chitragam road 6.25 KM BT ..	2.20	1.00	1.20	1.20
18.	Upgrading Saidpora Resh-nagri road 6 KM BT ..	1.94	0.65	1.29	1.29
19.	Upgrading Haddipora Kadder road 15 KM BT ..	6.94	1.78	5.16	5.16
20.	Upgrading Achabal Shangu Chatteergul road 21 KM ..	11.48	4.30	7.18	7.18
21.	Upgrading Shopian Khanzanbal Aharbal road 13 KM BT ..	6.61	1.95	4.66	4.66
22.	Upgrading by Shingting Barsoo link road 1.25 KM BT ..	1.00	0.40	0.60	0.60
23.	Upgrading Duru Bata-gund road 6.6 KM BT ..	3.64	0.35	3.29	3.29
24.	Upgrading and improvement of Anantnagh Mirdanter road 2 KM BT ..	1.08	0.11	0.97	0.97
25.	Remetalling and surfacing Damhal Hanjipora Aharbal 6.28 KM ..	6.28	5.68	0.60	0.60
26.	Metalling Damhal Hanjipora Tsimmer road ..	5.69	4.79	0.90	0.90
27.	Upgrading Salar Wahidan road 3.22 KM SH ..	0.88	0.20	0.68	0.68
28.	Upgrading Doru Aharbal and Dura Idgah 1 KM BT ..	0.68	0.32	0.36	0.36
29.	Kilam Brazulla road ..	0.98	0.55	0.43	0.43
TOTAL (Upgrading)		122.38	45.02	77.36	77.36

(b) Roads in Hilly and Backward Areas.

(i) State Highway.

1.	Daksum Symthan road 35 KM (F. W.) ..	220.00	11.44	71.00	71.00
----	--------------------------------------	--------	-------	-------	-------

Rural Roads.

1.	Kounserbal Zamisthal road 7 KM FW ..	9.51	2.40	7.11	7.11
2.	Road from Soof Shali Shatroo via Kharpora 13 KM SH ..	5.13	2.73	2.40	2.40
3.	Road from Seer to Pastana 3 KM FW ..	1.28	0.35	0.93	0.93
4.	Batapora to Lissar Branad road 8 KM FW. ..	2.73	0.26	2.47	2.47
5.	Verinag to Imoh 1.60 KM SH ..	1.21	0.11	1.10	1.10
6.	Road from Gops to Halsidar 2 KM SH ..	1.82	0.19	1.63	1.63
7.	Pahalgam Chandanwari road 16 KM. SH ..	6.32	5.21	1.11	1.11
8.	Shrimal Zowra roads. 4M ..	7.51	5.03	2.48	2.48
9.	Tikura Shadimarg road 3.M ..	10.89	6.27	4.62	4.62
10.	Bathipora Manzgam road 2.5 K M ..	5.66	3.24	2.42	2.42
11.	Chambgund Matwan road 5.5 B. T. ..	8.82	3.62	3.00	3.00
12.	Turka wangam Agglar road 10 M ..	6.96	3.56	3.40	3.40
13.	Vehil Mohama road 7 M SD ..	6.12	4.42	1.70	1.70
14.	Logripora to Yachnor 4.8 M SH ..	2.19	0.77	1.42	1.42
15.	Road from Bidder to Irkmu ..	1.51	0.68	0.83	0.83
16.	Awantipora Tral road to Madura Khanqah 4M SH ..	1.56	0.97	0.59	0.59
17.	Road from Chambgund Gudder 4 M SH ..	3.23	1.63	1.60	1.60
18.	Road from Gadole to Lahorsanzi 3.2 MFW ..	2.19	0.05	2.14	2.14
19.	Road from Keller to Abhama 5 KM FW ..	4.00	0.42	3.58	3.58
20.	Link road from Aripal to Lam 3.20 KM ..	1.70	0.27	1.43	1.43
21.	Road from Tral to Kah-lil 5.5 KM FW ..	1.36	0.78	0.58	0.58

2	3	4	5	6
Road from Ahrabal to Kangwatan 8 KM. P.	40.00	0.47	4.66	4.66
Const. of road from Nawgam to Indu via Kuthar 8 KM FW	3.20	1.05	2.17	2.17
Road from Qazigund to Dalwach to Taragam 4.80 KM. FW	1.00	0.80	0.20	0.20
Rajpora Nikas road. 1.5 KM. SH	3.88	0.21	3.67	3.67
Internal roads at shangus 1.5 KM. SH	1.04	0.20	0.84	0.84
Kund to Razal 2.4 KM. FW	0.80	0.13	0.67	0.67
Tsogam Lamer road 4 KM. SH	4.63	2.50	2.04	2.04
Chattergul Thimran road. 3.50 KM. M	2.72	0.45	2.27	2.27
Link road to Gohan 1/2 KM. SH	0.26	0.05	0.21	0.21
TOTAL (Rural Roads)	149.23	48.89	63.27	63.27
TOTAL (Roads in Hilly & Back ward Areas)	369.23	60.33	134.27	134.27

Other rural roads :

Const. of road from National Highway to Nasu Badragund	1.40	0.10	1.30	1.30
Mir Bazar Anantnagh via Furah 4 KM FW.	4.55	2.90	1.65	1.65
Badura to Hakura 3 KM PW	4.89	1.90	2.99	2.99
Redwani Babapora road 8KM	9.36	6.85	2.51	2.51
Siligam Loggripora via Manzgam road 4.5 KM	3.43	1.26	2.17	2.17
Gopalpora Telwani road 3 KM SH	2.11	0.90	1.21	1.21
Kanilwan to Okura via Magreypora 3.5 KM FW	3.55	0.24	3.31	3.31
Yamrach to Behibag road 2.5 KM SH	4.00	1.59	2.41	2.41
Road from Hangalbush to Munadgafan via Matipora 2.5 KM SH	4.00	1.14	2.86	2.86
Road from Imam Shaib to Tranz 4.25 Km FW	1.78	0.55	1.23	1.23
Road from Kadder to Maharsipora 1.5 KM SH	2.47	1.15	1.32	1.32
Road from Handev Narwani to Munadgaphan	4.76	2.45	2.31	2.31

1	2	3	4	5	6
13.	Road from Khiram to National Highway Mile 25th via Sirhama	4.76	2.45	2.31	2.31
14.	Link road to Lidru 3KMFW	1.97	0.60	1.37	1.37
15.	Road from Kullar to Yanir Cherigam 1.60 KM FW	1.22	0.15	1.07	1.07
16.	Road from Siligam to Krishangam via Sengrus 3.5 KM FW	1.98	1.30	0.78	0.78
17.	Road from Nowbugh Ziaratsharif Waltengoo 1 KM FW	1.56	0.30	1.26	1.26
18.	Road from Vessu to Devsar via Mandoll and Adigam 35 KM FW	3.82	0.43	3.39	3.39
19.	Development of Duru Bazar BT	3.19	0.30	2.89	2.89
20.	Road from Ranipora to Krad 2 KM SH	1.47	0.50	0.97	0.97
21.	Road from Kongrus to Palbug 1.5 KM SH	1.46	0.50	0.96	0.96
22.	Road from Khanabal to Batapora Seephan Village 1.5 KM SH	4.66	2.42	2.24	2.24
23.	Const. of road from Hablishoo to Manigam 1.6 KM FW	1.46	0.05	1.41	1.41
24.	Road from Ujar to Narmag via Saidiwara 5.50 KM FW	3.58	1.40	2.18	2.18
25.	Const. of road from Larkipora Lika Bawan with Kuchpora link road 2.61 KM FW	1.90	0.25	1.65	1.65
26.	Road from Karimabad to Monghama road 1.60 KM FW	1.44	0.51	0.93	0.93
27.	Road from Mandyan Gangoo via Wathora 3.2 KM FW	1.52	0.45	1.07	1.07
28.	Road from Mitrigam to Sontabugh via Patrigam 3.20 KM FW	1.66	0.59	1.07	1.07
29.	Road from Botengoo to Shamsipora 5.5 KM FW	2.18	0.68	1.50	1.50
30.	Road from Suchroo Barzulla Jagir Frisal 5.5 KM FW	5.47	0.48	4.99	4.99
31.	Road from Adipora to Mishipora 1.5 KM FW	1.70	0.25	1.45	1.45

1	2	3	4	5	6	1	2	3	4	5	6
32.	Road from Bindoo to Adigam 1.6 KM FW	1.05	0.54	0.51	0.51	54.	Improvement to Khanabal Pahalgam road (Miles 7-27) 21.B.T. ..	4.10	2.20	1.90	1.90
33.	Const. of Mattan link road to Mohalla Lonapora 0.5K M FW ..	1.02	0.60	0.42	0.42	55.	Hatigam link road 1 KM	1.15	0.04	1.11	1.11
34.	Road from Shamsipora Link road 1.5 KM ..	1.58	0.10	1.48	1.48	56.	Improvement to Khanabal Mendikadal Donipowa road ..	18.15	0.30	9.00	9.00
35.	Marhama Panchipora road 4 KM ..	2.35	0.23	2.12	2.12	57.	Zowra Keller road 6.5 KM	1.62	0.86	0.76	0.76
36.	Thajiwara Khandgam link road 2 KM SH	2.66	0.25	2.41	2.41	58.	Sangam Khudwani 12KM	5.74	1.87	3.87	3.87
37.	Road from Rambirpora to Rampore 1.60 KM FW	1.08	0.53	0.55	0.55	59.	Chatragam Sogam road 3.25 KM ..	1.18	0.51	0.67	0.67
38.	Arshipora to Ratnipora via Gadipora 5 KM FW	3.32	0.22	3.10	3.10	60.	Malangpora Chakwara via Panzgam 6 KM. FW	1.33	0.65	0.68	0.68
39.	Const. of road from Tahab to Jandwal 6.44 KM FW	4.06	0.37	3.69	3.69	61.	Road from National Highway to village Charsu 2 KM. FW ..	1.09	0.71	0.38	0.38
40.	Batanoor to Chiwalla 40 KM ..	1.95	0.20	1.75	1.75	62.	Const. of road from mile 9th Anantnagh Doru Verinagh road to Nawpora Sangran Gundi Nowroz 3.5 KM FW	2.76	0.05	2.71	2.71
41.	Ganeshpora to Krishengam link Road 5.60 KM FW ..	2.80	0.40	2.40	2.40	63.	Bijbehara Veri road ..	2.28	2.26	0.02	0.02
42.	Road from Tanji Mulla to Tsogam via Ponchalthan 4.8 KM	2.11	0.45	1.66	1.66	64.	Brar Hussan Noor road	2.21	2.01	0.20	0.20
43.	Const. of Pinglina Gundi-pora road ..	1.02	0.17	0.85	0.85	65.	Rambirpora Manipora road ..	2.36	2.33	0.03	0.03
44.	Road from Jablipora to Shamsipora 3 KM SH	2.81	0.25	2.56	2.56	66.	Qazigund Manzmoh road	1.64	3.34	0.30	0.30
45.	Road from Redwani Wampora 4 KM. FW ..	1.00	0.25	0.75	0.75	67.	Kaprin Hanjipora road	2.56	2.16	0.40	0.40
46.	Srigupwara Peth humbal road 3.3 KM. SH ..	3.17	2.54	0.63	0.63	68.	Albug Bulbul Nowgam road upto Sandu via Shalipor ..	1.92	1.72	0.15	0.15
47.	Okura Hugam road via Pushkari 5.5 KM. SH	4.05	2.90	1.15	1.15	69.	Logripora Yachnar road	2.19	0.78	1.41	1.41
48.	Hangulgund Watnar via Nor 5.80 KM. M ..	3.06	2.20	0.86	0.86	70.	Larkipora to Bonagund road via Gosangund ..	1.11	0.81	0.30	0.30
49.	Dahwathu to Yanir road 2.00M ..	2.20	1.24	0.96	0.96	71.	Takia Behremshah to Muniwar road ..	1.24	1.02	0.22	0.22
50.	Akhran Nawpora road. 1.61 KM. SH ..	0.70	0.43	0.27	0.27	72.	Improvement of Bijbehra Gadhanjipora road ..	1.42	1.22	0.20	0.20
51.	Bragam Hakura Badaisgam via Marguji road 6.5 KM. FW ..	4.17	2.00	2.11	2.00	73.	Road from Naiyana to Tahab via Chakura ..	8.25	8.20	0.05	0.05
52.	Wugjan Kamad road.	1.30	0.98	0.35	0.35	74.	Rajpora Koller road ..	8.83	8.73	0.10	0.10
53.	Improvement to Anantnagh Duru Verinagh road ..	3.07	1.78	1.29	1.29	75.	Tral Botagund Khulseer road ..	1.74	1.64	0.10	0.10
						76.	Chakoora Hanjipora Nillow RD ..	3.27	3.12	0.15	0.15
						77.	Pulwama Monghama road	3.33	3.03	0.30	0.30
						78.	Pulwama Payer road ..	4.43	3.83	0.60	0.60

2	3	4	5	6
Geru Tral road ..	7.18	6.18	1.00	1.00
Dangam Ratnipora Cha- koora road ..	1.92	1.82	0.10	0.10
Kulgam Sangas Kadder road ..	3.00	2.90	0.10	0.10
Extension of Tral Aripal to Narasthan ..	3.14	2.84	0.30	0.30
Patpan Tilangam ..	0.98	0.38	0.60	0.60
Desu Larnoo Lehanwan road ..	6.51	5.50	1.01	1.01
Widening of road from Mendi Kadal to Pam- posh Hotel ..	6.25	1.61	4.64	4.64
Extension of Utersoo Brariangan road to Omanagri 1.5 SH ..	0.71	0.09	0.62	0.62
Hugam Link Road FW	0.95	0.15	0.80	0.80
Link road to Rangrezpora and steps to Zinat Kulgam BT ..	0.84	0.44	0.40	0.40
Interior roads at Kulgam	0.33	0.24	0.09	0.09
Interior roads at Chawalgam	0.67	0.55	0.12	0.12
Hangalgush Narimarg road 1.5 KM FW ..	0.91	0.20	0.71	0.71
Extension of Salar Wahu- dan road to Yanir 1.5 KM FW ..	0.69	0.18	0.51	0.51
Pingilna Tangpora road FW 1.5 KM ..	0.81	0.40	0.41	0.41
Road from Pohu Chak- pora to Hassanwani 4.83 KM. FW ..	0.75	0.53	0.22	0.22
Batkote to Gujran Bat Kote Road ..	0.50	0.49	0.01	0.01
Kilam to Barzulla road.	0.62	0.57	0.05	0.05
Shahoo to Suchan road.	0.61	0.59	0.02	0.02
Raj-was bridge to Lariporal	0.62	0.52	0.10	0.10
Hanjidanter to Naidkhun Road. ..	0.38	0.13	0.25	0.25
National Highway like 39th to Damjan by way of shingling. ..	0.42	0.22	0.20	0.20
National Highway to Chaki Rajwali. ..	0.59	0.52	0.07	0.07
Bonigam Paiharna road.	0.62	0.37	0.25	0.25
Link road to Nawvathoo	0.58	0.42	0.16	0.16

1	5	3	4	5	6
104. Link road to Jamia Masjid Shangus. ..	0.44	0.09	0.35	0.35	
105. Inner road at Bijachara	0.50	0.30	0.20	0.20	
106. Extension of Drunian Panzeth to meet Shampore Panzeth. ..	0.87	0.62	0.25	0.25	
107. Tral Bragam road. ..	0.41	0.31	0.10	0.10	
108. Improvement to Shopian Bijbehara road (at Shopian and Bijbahara) ..	0.83	0.33	0.50	0.50	
109. Link road to Tulinaw- pora Danew road. ..	0.75	0.55	0.20	0.20	
110. Nawdal to Naibug ..	0.57	0.30	0.27	0.27	
111. Kaimoa Sonigam ..	0.76	0.39	0.37	0.37	
112. Gadele to Herahlan 4KM.	0.49	0.31	0.18	0.18	
113. Larnoo Drawey road mile 10 chains. ..	0.97	0.38	0.59	0.59	
TOTAL (Other Rural Roads)					
	278.46	137.40	132.21	132.21	

(d) *Strengthening of weak Pavement*

1. Mattan Achabal road. 10 KM. BI ..	3.00	2.15	0.85	0.85
2. Pulwama Neu road and Pakherpora Romu. ..	13.00	12.30	0.70	0.70
TOTAL (Strengthening of weak Pavements) ..				
	16.00	14.45	1.55	1.55

(e) *Bridges.*

1. Construction of Nohama Bridge on Kulgam Ahar- bal Road ..	29.43	22.28	7.15	7.15
2. Construction of foot bridge over Bringi Nallah between Hanjidanter & Mirdanter ..	1.95	1.53	0.42	0.42
TOTAL Bridges ..				
	31.38	23.81	7.57	7.57

TOTAL 'A' (i.e. Works in progress in Anantnag Distt.) 817.45 281.01 352.96 352.96

(B) *New Works in Anantnag Distt.*

a) Minimum Needs Prog- ramme ..	N. A.	..	130.15	130.15
b) Other Works ..	N. A.	..	154.11	154.11
TOTAL (New Works Anantnag Distt.) ..				
	N. A.	..	284.26	284.26
TOTAL ((Works in Anantnag Distt.) ..				
	817.45	281.01	637.22	637.22

£ Excludes estimated cost of new schemes

1	2	3	4	5	6
III. BARAMULLA DISTRICT.					
(A) Works in Progress.					
(a) Improvement to Low grade Sections (Upgrading)					
1. Upgrading Handwara Zachaldara Nichhama road 21 KM BT ..	10.07	1.40	8.67	8.67	
2. Remetalling and pre-mix carpeting Handwara Magam Shaloor road 25 KM BT ..	10.10	4.10	6.00	6.00	
3. Upgrading Watrigam Dangiwachha Chatoosa road 14.50 KM BT ..	5.00	1.65	3.36	3.35	
4. Upgrading Dolipora Taratpora road 5.50 KM MT ..	1.91	0.85	1.06	1.06	
5. Improvement and up-grading Nutnusa Kandi road 6.5 KM MT ..	3.90	0.65	3.25	3.25	
6. Upgrading Bandipora Ashwatoo road KM 11 MT	1.80	1.60	1.20	1.20	
7. Upgrading Watlab Chadkak road 14 KM BT ..	4.27	2.00	2.27	2.27	
8. Upgrading Sopore Shiva road 10 KM BT ..	4.66	2.13	2.53	2.53	
9. Upgrading Chankipora Dangerpora road 5 KM BT ..	2.42	0.70	1.72	1.72	
10. Upgrading Selu Dangerpora road 4 KM BT	1.80	0.50	1.30	1.30	
11. Upgrading Achabal Hyderpora Road 30 KM	1.00	1.00	1.00	1.00	
12. Upgrading Shaloor Bakhihaker road 11 KM MT ..	3.57	0.50	3.07	3.07	
13. Upgrading Kralpora Guzriyal road 4 KM MT	1.99	0.35	1.64	1.64	
14. Upgrading Lalpora Takin Batapora road 3 KM MT	1.00	0.05	0.95	0.95	
15. Upgrading Handwara link road 2.5 KM BT ..	1.17	0.23	0.94	0.94	
16. Upgrading Khumriyal Kalarooch Thayan road 7 KM MT ..	2.29	0.75	1.54	1.54	
17. Upgrading Chandilora Kalantra road 5 KM MT	2.00	0.60	1.40	1.40	
18. Upgrading Kralgund Ashipora road 12 KM MT	5.01	0.39	4.62	4.62	
19. Upgrading Langet Tulwari Haril road 10.25 KM MT ..	2.44	0.84	1.60	1.60	

1	2	3	4	5	6
20. Upgrading Tragpora Panzalla road via Shatloo 11.25 KM MT	4.49	1.95	2.54	2.54	
21. Upgrading Sopore town road ..	4.99	0.60	4.39	4.39	
22. Upgrading Zachaldara Satkuji road 6 KM MT	1.10	0.67	0.43	0.43	
23. Road from Octroi post Baramulla to Chetti Padshahi ..	3.95	1.39	2.57	2.57	
24. Metalling Chooria Kriri road ..	2.53	2.43	0.10	0.10	
25. Remetalling and black topping Kunzer Hardushora road 8 KM BT ..	3.50	0.40	3.10	3.10	
26. Hajin link road 2 1/2 KM BT ..	2.45	0.10	2.35	2.35	
27. Upgrading Wadura Link road 1.6 KM	0.43	0.10	0.33	0.33	
28. Upgrading Inner road at Mujgund 2 KM	0.86	0.07	0.79	0.79	
29. Upgrading Kalusa Gurdal road ..	1.51	1.31	0.20	0.20	
TOTAL (Upgrading) ..	92.70	28.21	64.49	64.49	

(b) Roads in Hilly and Backward Areas.

1. Zangam to Kunver via Yal 13 KM FW ..	6.43	1.30	5.13	5.13	
2. Extension of Lonharai Warsan road upto Dardson 8 KM SH ..	3.94	0.15	3.79	3.79	
3. Chandilora Kalqutra road 11.27 KM FW ..	4.85	3.96	0.89	0.89	
4. Wusan Karihama road 5.00 KM	2.00	0.60	1.40	1.40	
5. Pattan Babarshi Sahib road 22.5 KM M ..	17.48	12.79	4.69	4.69	
6. Handwara Lach Nowgam road 16.10 KM M ..	4.56	3.56	1.00	1.00	
7. Bakhihaker Shaloor road 11.5 KM FW ..	3.60	1.60	2.00	2.00	
8. Watrigam Dangiwach Ghastoos road 5.00 KM M	8.58	7.55	1.03	1.03	
9. Chkinarayan Dass to Bhawa via Chacki Chelram 5 KM FW ..	3.00	0.75	2.25	2.25	
10. Hewan Faqirbagh Chandoosa road 9.60 SH ..	4.48	2.61	1.87	1.87	
11. Ruhama Panzalla road 7.25 KM M ..	7.00	5.30	1.70	1.70	

	2	3	4	5	6		1	2	3	4	5	6
Hewan Loridora road 7 KM FW ..		5.00	3.80	1.20	1.20	6. Road from Wanigam to Kriri 4.83 KM FW ..			1.46	0.60	0.66	0.86
Faqirbagh Kandi Sultan- pora road 7 KM FW ..		2.96	0.61	2.35	2.35	7. Road from Lissar to Bud- han 3.22 KM FW ..			1.91	0.63	1.28	1.28
Kupwara Hahama Gul- gam road 17 KMFW		5.58	3.08	2.50	2.50	8. Kaloosa Nathpora road 3.2 KM SH ..			1.27	0.12	1.15	1.15
Turkpora Quilmuqam Malangam Alusa road		6.71	1.54	5.17	5.17	9. Manglore Lalpore road 3 KM FW ..			1.00	0.48	0.52	0.52
Taratpore Panzgam road 5.5 KM FW ..		1.57	0.80	0.07	0.77	10. Kriri Vizar Thindum road 4 KM ..			4.76	1.05	3.71	3.71
Sambar Chuntimulla road 7 KM FW ..		2.12	0.27	1.85	1.85	11. Road from Wagura to Manigam 2.5 KM FW			1.76	0.72	1.04	1.04
Road from Wadar to Nowgam (Bungas Hand- wara) 19 KM FW ..		4.87	0.03	4.84	4.84	12. Road connecting village Saloosa Vizer 2.5 KM FW			1.28	0.41	0.87	0.87
Road from Batakote to Magarnar 3.50 KM FW		1.76	0.35	1.41	1.41	13. Road from Kawchak to Wacipora via Doolipora 3.22 KM FW ..			1.21	0.33	0.88	0.88
Road from Kuligam to Krusan via Shiwan 4M		6.31	0.30	6.01	6.01	14. Link road Panjura to Goigam 3 KM FW ..			1.52	0.25	1.27	1.27
Road from Tangmarg to Drang 5 KM FW ..		3.25	0.18	3.07	3.07	15. Liser Saidinar Yarbuz Satherina road 5.5 KM FW			8.00	0.37	7.63	7.63
Road from Ziran to Hajibal road (Ziran to Warapora) 7 KM FW		1.01	0.10	1.71	1.71	16. Road from Magam Ahmadpora to Goom 3 KM FW ..			1.51	0.20	1.31	1.31
Sonarwani to Ahad Sharief road with link to Pamipora 2 KM FW ..		1.20	0.37	0.83	0.83	17. Link road to village Ladoora 3 KM ..			1.16	0.26	0.90	0.90
Road from Kachummuqam to Wagil via Dura Frist- wari 3 KM SH ..		4.15	0.50	3.65	3.65	18. Lalam Kakroors road 3.5 KM SH ..			2.29	0.13	2.16	2.16
Sheri to Zogiyar 1.5 KM SH ..		0.69	0.33	0.36	0.36	19. Redevelopment of Ban- dipore town 4 KM BT			4.94	0.05	4.89	4.89
Kralwath Cheki Chetram 1 KM FW ..		0.91	0.15	0.79	0.79	20. Chitpora Hib Danger- pora 4 KM SH ..			5.47	3.60	1.87	1.87
TOTAL (Roads in Hilly and Backward Areas)		114.84	52.58	62.26	62.26	21. Const. of road from Hachi- pora to Zethan 3.25 KM FW ..			1.75	0.35	1.40	1.40
C) Other Rural Roads :						22. Tumar link road 2 KM, SH			1.15	0.18	0.97	0.97
1. Pattan Trukapbal road 2.5 KM SH ..		1.76	0.96	0.80	0.80	23. Bomai link road 2.75 KM SH			1.00	0.11	0.89	0.89
2. Langate to Batagund road 6.44 KM FW ..		2.51	0.91	1.60	1.60	24. Shahalhal Devawsaper road 3.5 KM			2.87	0.35	2.52	2.5
3. Extension of road from Langate Tulwari to Waril 8 KM FW ..		2.50	1.09	1.41	1.41	25. Road connecting village Sonim with Pattan Babareshi Sahib road 5.5 KM MT ..			6.60	3.02	3.58	3.58
4. Road from Shanoo to Shipora 6.5 KM FW		4.98	0.62	4.36	4.36	26. Inner roads for Mujgund 1 KM M ..			1.00	0.07	0.93	0.93
5. Road from Yunis bridge to Kachhar 5 KMFW		2.00	0.72	1.28	1.28	27. Ajas link road 3 KM SH			3.50	0.10	3.40	3.40
						28. Chandigam Gangbugh Indurbugh road ..			10.34	10.04	0.30	0.30

1	2	3	4	5	6
29.	Gushi villagam road ..	5.26	4.96	0.30	0.30
30.	Hiri Zirhama road ..	3.03	2.63	0.40	0.40
31.	Chetkak Zaloora road	2.00	1.90	0.10	0.10
32.	Dolipora Tarathpora road	1.77	1.57	0.20	0.20
33.	Purkhan Kalantra road	6.00	5.76	0.24	0.24
34.	Delina Singpora Katha- wali road ..	4.40	4.32	0.08	0.08
35.	Nawpora Khaitangan Chandoosa road ..	5.20	3.77	1.43	1.43
36.	Behrampora Malganipora road	2.80	2.20	0.60	0.60
37.	Zandfaran Odura Namblan road ..	1.92	1.31	0.61	0.61
38.	Road from Handwara to Chogul via Braripora	1.27	0.86	0.41	0.41
39.	Kralgund Ashipora road	2.00	1.85	0.15	0.15
40.	Road from Doompore to Dandhra 1 KM SH	0.75	0.22	0.53	0.53
41.	Road from Watipora to Laherwalpora 2 KM FW	0.80	0.37	0.43	0.43
42.	Kralteng link road 0.5 KM MT ..	0.56	0.20	0.36	0.36
43.	Road from Paripore Lorihama 1.5 KM M	0.49	0.22	0.27	0.27
44.	Link road to Sangrama village 0.5 KM SH ..	0.54	0.05	0.49	0.49
45.	Langet Yaroo road ..	0.96	0.90	0.06	0.06
46.	Road from Pattan to Chaki Jalal Mir ..	0.60	0.22	0.38	0.38
47.	Road from Kunzer Har- dshore to Pattan Baba Reshi Sahib road ..	0.60	0.25	0.35	0.35
48.	Link road from N. S. road to Chicilor ..	0.72	0.25	0.47	0.47
49.	Tekipora Dewar road ..	0.88	0.43	0.45	0.45
50.	Lonhari Warson road ..	0.50	0.27	0.23	0.23
51.	Shalkote Halmatpora road	0.82	0.32	0.50	0.50
52.	Mader Gundi Kesar road	0.66	0.53	0.13	0.13
53.	Achabal Chatapora road	0.47	0.25	0.22	0.22
54.	Road from mile 4 S.C. road to Gundi Brah via Bona Brah	0.48	0.35	0.13	0.13
55.	Link road to Wadura villg.	0.35	0.22	0.13	0.13
56.	Rihbon Chilpora road	0.45	0.23	0.22	0.22

1	2	3	4	5	6
57.	Bomai Logripora road	0.41	0.21	0.20	0.20
58.	Construction of road from Lonhari to Milyal 2 KM BT ..	7.00	0.15	6.85	6.85
TOTAL (Other Roads)		135.19	71.34	63.85	63.85
(d) <i>Strengthening of Weak Payments :</i>					
Baramulla Handwara road		7.08	6.78	0.30	0.30
TOTAL (Strengthening of Weak Pavement) ..		7.08	6.78	0.30	0.30
(e) <i>Bridges :</i>					
1.	Bridge at Wampora Gurez	6.18	1.54	4.64	4.64
2.	Bridge across Pohru at Sonawani ..	8.60	0.01	8.59	8.59
3.	Motorable bridge at Wagilla over Nangli Nallah	3.00	0.10	2.90	2.90
4.	Bridge over Kahmi-l Nallah at Bangergund ..	2.00	1.20	0.80	0.80
5.	Haritar Bridge ..	9.00	5.75	3.25	3.25
6.	Foot bridge at Boniyar at Hapat Khai Nallah	1.21	0.30	0.91	0.91
7.	Construction of bridge over Pohru Nallah at Pohru Peth ..	4.57	0.60	3.97	3.97
8.	Foot Bridge at Khushi- pora over Nallah Viji	0.82	0.44	0.38	0.38
9.	Kulangam bridge ..	10.06	7.25	2.81	2.81
10.	Strengthening of Weak bridges and culverts ..	6.32	5.39	0.93	0.93
TOTAL (Bridges) ..		51.76	22.58	29.18	29.18
TOTAL Works in Prog- ress in Baramulla District		401.57	181.49	220.08	220.08
(B) <i>New works in Baramulla District</i>					
(a) Minimum Needs Prog- ramme ..		N.A.	..	148.81	148.81
(b) Other Works ..		N.A.	..	154.27	154.27
TOTAL (New Works Bmla: Distt:)		N.A.	..	303.08	303.08
TOTAL (Works in Baramulla Distt:)		401.57	181.49	523.16	523.16
IV. <i>Common items (i.e. Estt. Surveys, T.P., Mech. & Stores etc., etc.)</i> ..					
		247.16	..	247.16	247.16
TOTAL (Roads and Bridges Kmr.)		1747.02	572.66	1925.00	1925.00

£Excludes estimated cost of New Schemes.

SEMEWISE FIFTH FIVE YEAR PLAN OUTLAY

Roads & Bridges

JAMMU DIVISION.

No.	Head/Sub-Head/ Scheme.;	Total estimated cost.	(Rs. in lakhs)		
			Anticipa- ted ex- penditure ending 4th Plan	5th Plan approved outlay	Total capital
			2	3	4
			3	4	5
			4	5	6
			5	6	7
			6	7	8
			7	8	9
			8	9	10
			9	10	11
			10	11	12
			11	12	13
			12	13	14
			13	14	15
			14	15	16
			15	16	17
			16	17	18
			17	18	19
			18	19	20
			19	20	21
			20	21	22
			21	22	23
			22	23	24
			23	24	25
			24	25	26
			25	26	27
			26	27	28
			27	28	29
			28	29	30
			29	30	31
			30	31	32
			31	32	33
			32	33	34
			33	34	35
			34	35	36
			35	36	37
			36	37	38
			37	38	39
			38	39	40
			39	40	41
			40	41	42
			41	42	43
			42	43	44
			43	44	45
			44	45	46
			45	46	47
			46	47	48
			47	48	49
			48	49	50
			49	50	51
			50	51	52
			51	52	53
			52	53	54
			53	54	55
			54	55	56
			55	56	57
			56	57	58
			57	58	59
			58	59	60
			59	60	61
			60	61	62
			61	62	63
			62	63	64
			63	64	65
			64	65	66
			65	66	67
			66	67	68
			67	68	69
			68	69	70
			69	70	71
			70	71	72
			71	72	73
			72	73	74
			73	74	75
			74	75	76
			75	76	77
			76	77	78
			77	78	79
			78	79	80
			79	80	81
			80	81	82
			81	82	83
			82	83	84
			83	84	85
			84	85	86
			85	86	87
			86	87	88
			87	88	89
			88	89	90
			89	90	91
			90	91	92
			91	92	93
			92	93	94
			93	94	95
			94	95	96
			95	96	97
			96	97	98
			97	98	99
			98	99	100
			99	100	101
			100	101	102
			101	102	103
			102	103	104
			103	104	105
			104	105	106
			105	106	107
			106	107	108
			107	108	109
			108	109	110
			109	110	111
			110	111	112
			111	112	113
			112	113	114
			113	114	115
			114	115	116
			115	116	117
			116	117	118
			117	118	119
			118	119	120
			119	120	121
			120	121	122
			121	122	123
			122	123	124
			123	124	125
			124	125	126
			125	126	127
			126	127	128
			127	128	129
			128	129	130
			129	130	131
			130	131	132
			131	132	133
			132	133	134
			133	134	135
			134	135	136
			135	136	137
			136	137	138
			137	138	139
			138	139	140
			139	140	141
			140	141	142
			141	142	143
			142	143	144
			143	144	145
			144	145	146
			145	146	147
			146	147	148
			147	148	149
			148	149	150
			149	150	151
			150	151	152
			151	152	153
			152	153	154
			153	154	155
			154	155	156
			155	156	157
			156	157	158
			157	158	159
			158	159	160
			159	160	161
			160	161	162
			161	162	163
			162	163	164
			163	164	165
			164	165	166
			165	166	167
			166	167	168
			167	168	169
			168	169	170
			169	170	171
			170	171	172
			171	172	173
			172	173	174
			173	174	175
			174	175	176
			175	176	177
			176	177	178
			177	178	179
			178	179	180
			179	180	181
			180	181	182
			181	182	183
			182	183	184
			183	184	185
			184	185	186
			185	186	187
			186	187	188
			187	188	189
			188	189	190
			189	190	191
			190	191	192
			191	192	193
			192	193	194
			193	194	195
			194	195	196
			195	196	197
			196	197	198
			197	198	199
			198	199	200
			199	200	201
			200	201	202
			201	202	203
			202	203	204
			203	204	205
			204	205	206
			205	206	207
			206	207	208
			207	208	209
			208	209	210
			209	210	211
			210	211	212
			211	212	213
			212	213	214
			213	214	215
			214	215	216
			215	216	217
			216	217	218
			217	218	219
			218	219	220
			219	220	221
			220	221	222
			221	222	223
			222	223	224
			223	224	225
			224	225	226
			225	226	227
			226	227	228
			227	228	229
			228	229	230
			229	230	231
			230	231	232
			231	232	233
			232	233	234
			233	234	235
			234	235	236
			235	236	237
			236	237	238
			237	238	239
			238	239	240
			239	240	241
			240	241	242
			241	242	243
			242	243	244
			243	244	245
			244	245	246
			245	246	247
			246	247	248
			247	248	249
			248	249	250
			249	250	251
			250	251	252
			251	252	253
			252	253	254
			253	254	255
			254	255	256
			255	256	257
			256	257	258
			257	258	259
			258	259	260
			259	260	261
			260	261	262
			261	262	263
			262	263	264
			263	264	265
			264	265	266
			265	266	267
			266	267	268
			267	268	269
			268	269	270
			269	270	271
			270	271	272
			271	272	273
			272	273	274
			273	274	275
			274	275	276
			275	276	277
			276	277	278
			277	278	279
			278	279	280
			279	280	281
			280	281	282
			281	282	283
			282	283	284
			283	284	285
			284	285	286
			285	286	287
			286	287	288
			287	288	289
			288	289	290
			289	290	291
			290	291	292
			291	292	293
			292	293	294
			293	294	295
			294	295	296
			295	296	29

1	2	3	4	5	6	1	2	3	4	5	6				
23.	Road from Samba to Labbi Marh ..	5.98	0.70	2.28	..	44.	Link Road to Lumi Malpor via Savika ..	1.88	0.53	1.35	1.35				
24.	Road from Bajalta to Purmandal ..	4.66	0.80	2.00	2.00	45.	Link road to Chack Palwal ..	1.00	0.66	0.34	0.34				
25.	Road from Mandal mile 10th Kafuchak Purmandal road to Utterbani ..	1.35	0.50	0.85	0.85	46.	Link road to Nardani Bijwan ..	1.17	1.03	0.15	0.15				
26.	Road from Raya to Karel via Mareen Gadeyal ..	0.79	0.50	0.29	0.29	47.	Const. of road on Bank of Chhal via Shaktinagar with bridge over Canal near B. S. F.; Hq. ..	3.00	1.07	1.00	1.06				
27.	Pindi Sarochan to Hari-pur (Ph. I) ..	1.44	1.28	0.20	0.20	48.	Const. of approach road to foot Bridge at Goalpa-tion ..	1.49	0.80	0.69	0.69				
28.	Road from Salain to Chak Majara (Ph. I) ..	1.54	0.40	1.14	1.14	49.	Jourian Indri Pataan Road ..	1.50	0.55	0.95	0.95				
29.	Extension of Chak Sala-rian Kaulpur to Link Chhani Swabbia ..	1.95	0.90	1.05	1.05	50.	Sumun to Baldoh road ..	4.00	0.55	3.00	3.00				
30.	Link road connecting Sarwal to Palipura and Rehari Tope-Sherkhan via Village Patoli Man-gotran ..	0.96	0.62	0.40	0.40	51.	Link road from Top-Sher-Khania to Cannal ..	2.40	0.75	1.00	1.00				
31.	Akhnoor Sumah road ..	5.42	2.03	2.00	2.00	52.	Extension of Road tochi-nore ..	0.65	0.55	0.10	0.10				
32.	Sohal to Kaleeth road (Ph.I) ..	3.33	2.53	0.80	0.80	53.	Construction of road from Sohal to Kaleeth (Part 2nd) from 7th to 10th ..	3.34	0.90	1.44	1.44				
33.	Badli Sigral Mangial Anirpur Sidhar Latial Babar road ..	5.20	1.00	2.00	2.00	54.	Approach road to Rail-way Station Jammu ..	56.60	18.90	15.00	15.00				
34.	Extension of Aghora Sarota road to Rabta ..	3.76	1.00	2.76	2.76	55.	Mett: Tarr: Chingaini talab link road ..	2.26	0.65	0.40	0.40				
35.	Nagrota to Darabi Link road ..	19.28	2.33	5.00	5.00	56.	Construction of link road village Charota from mile 12th Janipura Ambgrota road ..	1.23	0.40	0.30	0.30				
36.	Link Road from Soripan-ditan to Thanda Pani ..	3.00	0.63	2.37	2.37	57.	Mett: and Tarr: Kanachack Jerhi road 2 miles ..	0.99	0.65	0.30	0.30				
37.	Missriwala to Halqa via Takerian road ..	1.78	0.77	1.01	1.01	TOTAL (Other Roads Jammu Distt.) ..						304.27	165.31	86.86	86.86
38.	Amb Garota road to meet Jammu Akhnoor road via Polora ..	2.27	0.90	1.37	1.37	(c) Bridges:									
39.	Bhagatpur to Kukrian via Sangwan Road ..	2.73	1.75	1.00	1.00	1.	Construction of 300 span sus-pension bridge at Jatta over Basantar Nallah ..	5.55	4.70	0.85	0.85				
40.	Merh to Jaswan via Jaffar Chack ..	2.50	1.51	1.00	1.00	2.	const. of a bridge single lane at Aik nalah near Saikalan 12' width ..	16.39	3.39	13.00	13.00				
41.	Const. of approach road & widening of old Akhnoor Bazar ..	4.92	1.20	2.00	2.00	3.	Strengthening of bridges and culverts (strengthening of 5' span bridge on Jammu Gajansoo road) ..	1.40	1.10	1.10	1.10				
42.	Link road from Khasi to Nagrota ..	2.66	0.93	1.00	1.00	4.	Remodelling and streng-thening of weak bridges and culverts ..	8.00	5.92	12.0	12.00				
43.	Link road from Dhar Dhara-chan to Janipora Ambgarota road ..	2.30	0.66	1.00	1.00	TOTAL (Bridges Jammu Distt.) ..						31.34	15.11	26.95	26.95
						TOTAL (works in progress Jammu Distt.) ..						417.70	216.76	142.31	142.31

	2	3	4	5	6
3) New Works in Jammu District.					
(a) Basic minimum needs Progm. ..	N.A.	..	59.21	59.21	
(b) Other New Works ..	N.A.	..	191.43	191.43	
TOTAL (New Works in Jammu Distt.) ..	N.A.	..	250.64	250.64	
Total Works in Jammu District ..	417.70	216.76	392.95	392.95	

H. KATHUA DISTRICT

(A) Works in Progress

(a) Upgrading:

1. Koota Rattanpur road via Garnoli ..	1.99	0.94	1.05	1.05
2. Mett. and Surfacing Billawar Sukhrala Devi Ji road ..	2.66	1.73	0.93	0.93
3. Mett. and Sh. Ujh Dam site road ..	2.32	1.30	1.02	1.02
4. Mett. & Tarr. road to Muthi Rakhwalan road ..	1.65	1.10	0.55	0.55
5. Mett. Sur. Dhanoo link road ..	2.34	1.15	1.19	1.19
6. Mett. Tar. road Katal Jindi road ..	1.72	0.65	1.07	1.07
7. Impt. to Hiranagar bazar ..	0.61	0.55	0.10	0.10
8. Const. of Haripur Padal Pansar road Ph.II. ..	2.67	2.51	0.16	0.16
9. Upgrading of Koota Rattanpur road ..	3.24	1.25	1.00	1.00
10. Plasi Mahanpur road Upgrading ..	5.00	1.25	1.75	1.75
11. Chack Sakta to Ghati Upgrading ..	1.70	1.30	0.40	0.40
12. Upgrading of Logate road ..	1.56	1.20	0.36	0.36
13. Construction of cause way on OS Kpoad ..	65.00	N.A.	10.00	10.00
TOTAL (Upgrading Kathua Distt.) ..	92.46	14.93	19.58	19.58

(b) Rural Roads.

1. Basohli Bani-Bhaderwah road ..	700.00	66.87	125.00	125.00
2. Const. of road from Plasi to Mahan Pur inclu. hingling ..	12.96	7.86	3.00	3.00

Excludes estimated cost of New Schemes.

	1	2	3	4	5	6
3. Const. of Basohli Sanan-ghat road ..	10.94	8.16	2.00	2.00		
4. Const. of Kotta-Rattanpur road ..	6.29	3.05	2.00	2.00		
5. Const. of link road from Chak Sabala to Ghar ..	2.56	2.84	1.84	1.84		
6. Const. of link road from Hari nagar joining O.S.K. ..	4.17	1.36	1.81	1.81		
7. Const. of Plasi Sewar road ..	4.09	3.28	0.81	0.81		
8. Const. of road from Furad to Marta Nag-roti (6.1.665) ..	2.73	1.98	0.74	0.74		
9. Const. of link road from main JP road to village Seshwan ..	1.19	0.80	0.39	0.39		
10. Const. of link road from JP road to Thacker Pura ..	1.04	0.90	0.14	0.14		
11. Const. of road from OSK road Lala Chak ..	1.74	1.00	0.74	0.74		
12. Cont. of road from VR main JP road to Gurah Baldaran ..	0.79	0.72	0.05	0.05		
13. Const. of road from main JP road to Dila Chak to Lora Mela ..	1.08	0.60	0.48	0.48		
14. Const. of road from Dinga Amb to Bakhta Battal ..	1.00	0.70	0.30	0.30		
15. Const. of road from Arhan Chack to Dhalapur ..	1.38	0.55	0.83	0.83		
16. Const. of road from Jammu Pathankot road to Generi ..	1.94	0.85	1.09	1.09		
17. Const. of road from Bhaya to Barab ..	1.14	0.65	0.49	0.49		
18. Const. of road from Dila Chak to Satoora ..	0.80	0.70	0.10	0.10		
19. Mandial to LSK road ..	1.17	0.60	0.57	0.57		
20. Const. of road from Dinga Amb to Katli ..	2.42	1.00	1.41	1.41		
21. Const. of road from OSK road to Sanyal ..	1.71	1.28	0.43	1.41		
22. Const. of road from Billawar to Katli via Kishanpur ..	3.89	1.61	1.28	1.28		
23. Const. of Airwan Barmoli Gond road ..	1.00	0.95	0.05	0.05		
24. Const. of road from Mandi to Kishanpur Dangara ..	1.80	0.20	0.30	0.30		

1	2	3	4	5	6
25.	Dhar Udhampur road to Ucha Pind road ..	2.26	0.78	1.48	1.48
26.	Const. of road from Sukharalla to Machadi ..	3.97	1.62	1.35	1.35
27.	Const. of road from Digota to Kumari ..	12.00	0.93	5.00	5.00
28.	Link road from Barwal to Utri ..	0.75	0.40	0.35	0.35
29.	Const. of road from Buddi to Naj ..	1.80	0.25	1.55	1.55
30.	Hatli to Hatli Bus stand road ..	0.60	0.30	0.30	0.30
31.	OSK road Gangu Chack ..	1.38	0.95	0.43	0.43
	TOTAL (Rural Roads Kathua Distt.) ..	790.59	112.54	156.31	156.31

(c) *Other Roads:*

1.	Upgrading Basohli Bani road for 5 miles ..	2.98	0.40	0.75	0.75
2.	Construction of causeway on Slur nallah ..	4.50	0.40	1.00	1.00
3.	Extension of Sukhrala Machedi Road ..	3.71	0.40	0.80	0.80
4.	Extension of Billawar Krishanpur Kantli road ..	2.96	0.40	0.70	0.70
5.	Extension of Mandli Kishanpur road ..	2.98	0.40	0.75	0.75
	TOTAL (Other Roads Kathua Distt.) ..	17.13	2.00	4.00	4.00

(d) *Bridges and Culverts*

1.	Const. of 161' span steel bridge over Gannool nallah in mile 18th on lakhampur Basolhi road ..	4.55	1.78	2.77	2.77
2.	Const. of 600 Rft. bridge over nallah Naz. at Billawar ..	30.00	0.70	29.30	29.30
3.	Const. of culvert on Devachak ..	1.02	0.93	0.10	0.10
4.	Const. of 330 Rft. foot suspension bridge over nallah Bheeni at Katli ..	6.00	4.01	1.99	1.99
5.	Const. of Causeways on Katal Jandi road ..	2.56	2.19	0.37	0.37
	TOTAL (Bridges and culverts Kathua Distt.) ..	44.13	9.61	34.5	34.53
	TOTAL (Works in Progress Kathua Distt.) ..	944.31	140.08	213.42	213.42

1	2	3	4	5	6
(B) New Works in Kathua District					
a)	Basic minimum needs Programme ..	N. A.	..	16.72	16.72
b)	Other new Schemes ..	N. A.	..	53.70	53.70
	TOTAL (New Works in Kathua distt.) ..	N. A.	..	70.42	70.42
	TOTAL WORKS IN KATHUA DISTRICT ..	944.31£	140.08	283.84	283.84

III UDHAMPUR DISTRICT**(A) Works in Progress****(a) Upgrading:**

1.	Krimchi Lander read Sol. Mett. and premxing ..	8.21	2.63	2.45	2.45
2.	Mett. Tarr. Udhampur Katra road ..	6.41	2.78	1.62	1.62
3.	Wid. Strengthening Chenani Sudh Mahadev road ..	5.30	2.10	3.20	3.20
4.	Impitt. to Katra Vaishnool Devi Ji. Road ..	9.66	8.81	0.85	0.85
5.	Wid. of road Damel Junction to Junction to Jindrah Katra road. ..	2.65	1.50	1.15	1.15
	TOTAL (Upgrading Udhampur Distt.) ..	32.23	17.82	9.27	9.27

(b) Roads in Hilly Areas

1.	Const. of Krimchi Lander road PH. I ..	28.86	19.34	9.52	9.25
2.	Const. and Improvement Ramnagar Dodoo road upto Majouri road ..	39.37	15.00	10.00	10.00
3.	Const. of Sudhmadev Dadoo road ..	76.31	11.56	12.00	12.00
4.	Const. of Tikri Jangglgali road. ..	52.68	10.66	4.00	4.00
5.	Const. of Kanth gali Bamag road upto mile 3rd. ..	4.93	3.85	1.08	1.08
6.	Udhampur to Bradian via Battal Balian road ..	4.02	2.13	1.89	1.89
7.	Battal Majalta road ..	3.26	1.20	2.06	2.06
8.	Panthal to Jhajjar via Trithi ..	2.90	0.70	2.20	2.20
9.	Banian to Chari ..	7.02	0.80	2.22	2.22
10.	Const. of road from Tara to surrisar ..	3.31	1.30	2.01	2.01

£:- excludes estimated Cost of New schemes

1	2	3	4	5	6
11.	Const of Kud Barmain road.	3.21	2.00	1.21	1.21
12.	Const. of Jih Jathi road.	2.35	1.22	1.13	1.13
13.	Link road from Forest Office to Transport Yard.	2.45	1.50	0.95	0.95
14.	Const. of Sulmey Garhi road upto Kaldi ..	5.27	1.75	3.52	3.52
15.	Symbal Choi to Derra Baba Banda Sahib. ..	8.37	5.65	2.72	2.72
TOTAL (Roads in Hilly Areas Udhampur Distt.) ..		244.31	78.66	56.51	56.51

(c) *Khadolies :*

1.	Khadolies in Udhampur, Ramnagaer (Tehsils) and other difficult places ..	4.11	0.82	3.29	3.29
TOTAL (Khadolies in Udhampur Distt) ..		4.11	0.82	3.29	3.29

(d) *Other Works:*

1.	Foot suspension bridge over nallah Bindraban (Ramnagar Tehsil). ..	2.00	0.55	0.50	0.50
2.	Const. of road from Bus Stand to Ghigli Chowra in Ramnagar Tehsil.	2.97	0.40	0.70	0.70
3.	Const. of Naganoo Chanoota road via Joun. ..	5.00	0.55	1.00	1.00
4.	Salamat Gordi road sector Burmin 4 miles. ..	6.00	0.50	1.00	1.00
5.	Anji Panasa road. ..	4.81	0.45	0.80	0.80
TOTAL (Other Works Udhampur Distt.) ..		20.78	2.65	4.00	4.00

(e) *Bridges :*

1.	Const. foot suspension bridge to connect Chalano with Mukwal ..	7.41	4.62	2.79	2.79
2.	Const. of foot suspension bridge over nallah Gangote	5.54	5.23	0.31	0.31
3.	Const. of foot suspension bridge over nallah Kohbi ..	1.60	1.50	0.10	0.10
5.	Janganoo bridge ..	9.65	8.57	1.08	1.08
TOTAL (Bridges Udhampur Distt.) ..		24.20	19.92	4.28	4.28
TOTAL (Works in Progress in Udhampur District) ..		325.63	119.87	77.35	77.35

1	2	3	4	5	6
(B) <i>New Works in Udhampur District:</i>					
(a)	Basic Minimum Needs Programme ..	N.A.	..	180.32	180.32
(b)	Other New Works ..	N.A.	..	74.76	74.76
TOTAL (New Works in Udhampur District) ..		N.A.	..	255.08	255.08
TOTAL Works in Udhampur District ..		325.63	119.87	332.43	332.43

IV. **DODA DISTRICT :**(A) **Works in Progress :**(a) *Upgrading :*

1.	Sh. Mett. Tarr. Dham Kund Ghool Road (Ph. II)	5.82	3.78	2.04	2.04
2.	Mett. Sur Doda Thathri Kishtwar road ..	20.11	15.19	2.92	2.92
3.	Mett. Tarr. Patni Sana-sar road ..	8.73	8.14	0.59	0.59
4.	Widening of Neel Chamawas road (mile 4th to 8th) ..	5.30	1.74	1.56	1.56
5.	Strengthening of Sub-grade Batote-Doda road ..	17.46	3.59	13.87	13.87
TOTAL (Upgrading Doda Distt.)		57.42	32.44	20.98	20.98

(b) *Roads in Hilly Areas :*

1.	Const. of Kishtwar Chatroo road upto Mugal Maidan	29.33	25.66	3.97	3.97
2.	Chatroo Symthan road Mugal Maidan onward to Chatroo ..	544.00	21.00	125.00	125.00
3.	Const. of Thathri Kilotran road upto Gandoh	52.65	50.51	2.14	2.14
4.	Const. of Kishtwar Paddar road upto Gulher ..	26.40	21.17	3.00	3.00
5.	Const. of Kishtwar Paddar road Gulhar Atheli sector ..	20.39	11.96	5.00	5.00
6.	Banihal Lamber road	7.69	5.90	2.09	2.09
7.	Kishtwar Paddar Saphi-remine road ..	6.80	2.13	2.07	2.07
8.	Kishtwar Chatroo Symthan bridle road ..	6.84	2.69	2.00	2.00

£ Excluded estimated cost of new schemes

1	2	3	4	5	6
9.	Doda Ghat road ..	2.30	2.08	0.22	0.22
10.	Chobian link road ..	4.84	4.57	0.27	0.27
11.	Sarthal Devi Ji road (Hasti -Galigarh sector)	7.58	1.50	3.00	3.00
12.	Kuriven Keshwan road	7.20	1.30	2.00	2.00
13.	Const. of road from Gool to Mohore (T/P) ..	2.00	1.39	0.61	0.61
14.	Const. of Doda Dess road	4.97	2.50	2.47	2.47
15.	Banihal Mohumangat road	7.39	1.85	2.00	2.00
16.	Doda Bhart road ..	6.63	2.33	2.00	2.00
17.	Ramsu Pogal road ..	6.59	2.03	2.00	2.00
18.	Bridle road from Sangaldan to Tata Pani	2.16	1.62	0.54	0.54
TOTAL (Roads in Hilly Areas Doda District) ..		745.76	162.19	194.98	194.98

(c) Other Works :

Metalling and Black top-
ping of 1st 4 miles of
Kishtwar Chatroo road

3.82 0.50 1.00 1.00

TOTAL (Other Works
Doda Distt.)

3.82 0.50 1.00 1.00

(d) Bridges :

1. Construction of foot
suspension bridge near
Mansu over river Chenab

4.00 1.45 2.55 2.55

2. Improvements of Weak
bridge on Batote Bhader-
wah road ..

5.00 3.75 1.26 1.26

3. Strengthening of bridge
on Kishtwar Paddar
Bridle Path ..

1.50 1.00 0.50 0.50

TOTAL (Bridges, Doda
District) ..

10.50 6.20 4.31 4.31

TOTAL (Works in prog-
ress in Doda
District) ..

817.50 201.33 221.27 221.27

(B) New Works in Doda District :

(a) Basic minimum needs Progm.

(b) Other New Schemes

N.A. .. 117.15 117.15

TOTAL (New Works
in Doda Distt.)

N.A. .. 117.15 117.15

TOTAL Works in Doda
District ..

817.50 £ 201.33 338.42 338.42

£ Excludes estimated cost of new schemes

1	2	3	4	5	6
---	---	---	---	---	---

V RAJOURI DISTRICT

(A) Works in Progress :

(a) Upgrading :

1. Wid. Soit Kalakote
road Phase II ..

34.79 20.80 4.99 4.99

2. Black Topping of road
from Beragawan to
Tatapani ..

8.00 1.00 2.00 2.00

TOTAL (Upgrading
Rajouri Distt.)

42.79 21.80 6.99 6.99

(b) Roads in Backward Areas :

1. Const. of Dharal Thana-
mandi road Neeli sector

4.12 3.93 0.19 0.19

2. Const. of Dharal Kandi
road ..

5.19 4.68 0.51 0.51

3. Extension of Shiv Khori
road Ramsu to Shiv
Kkori ..

2.29 0.20 1.06 1.06

4. Extension of Dharal
Kandi road ..

4.70 1.69 1.00 1.00

5. Road from Thanamandi
to Shadra Sharif upto
village Pangi ..

5.70 1.40 1.30 1.30

6. Road from Gulathi to
Gangir Muggallah upto
village Kotli ..

6.00 1.35 1.00 1.00

7. Extension of Dharal
Thanamandi road ..

3.83 1.44 1.49 1.49

8. Const. of Kjeri Saria to
Shiv Khori ..

11.89 6.76 1.00 1.00

9. Dangeri Dalhori road

9.28 7.03 1.50 1.50

10. Const. of Kural Mugallah
road ..

11.91 8.62 1.00 1.00

11. Const. of road from Bha-
mala to Teridith via
Makole and Devak ..

7.12 1.50 2.00 2.00

12. Const. of Chhani Peret
to Salarri Sarot via
Marchela ..

2.82 1.36 1.00 1.00

13. Const. of road from
Lamberi Dharat Bridge
to Debbar Potha ..

4.73 1.10 1.00 1.00

14. Const. of road from Solki
to Panjanara Pandwa
upto Bathara ..

6.86 1.42 1.50 1.50

15. Road from Rajal Garin
Phati village ..

4.23 1.51 1.72 1.72

	2	3	4	5	6
Const. of road from Rajouri Doda via Chowdrinar ..	5.50	0.98	3.00	3.00	
Const. of Nadian link road ..	0.26	0.26			
TOTAL (Roads in Backward Areas Rajouri Distt.)	96.43	45.23	20.27	20.27	

Other Works :

Road from Chingus to Bagla Bridiala (2 miles)	2.10	0.70	1.00	1.00	
Road from Kotranka to Khawas (2 miles) ..	2.21	0.55	1.00	1.00	
Road from Jawala bridge to village Khah (1 mile)	2.10	0.45	1.25	1.25	
Const. of Drainage Crossing and widening narrow stretches of Rajouri Darhal road ..	3.00	0.60	1.50	1.50	
Foot bridge at San Samote (Atti) on Thana Mandi Nallah ..	1.25	0.45	0.80	0.80	
Jaula bridge at Harate ..	1.20	0.45	0.75	0.75	
Salhori to Athma via Thandi Kassi (4 Kms)	6.00	0.60	3.50	3.50	
Midhta to Knthal via Bandi Allah (1 Kms)	6.00	0.60	3.00	3.00	
TOTAL (Other Works Rajouri District) ..	23.86	4.40	12.80	12.80	

Bridges :

Const. of Motorable suspension bridge Chinges nallah ..	7.49	4.48	3.01	3.01	
Const. of motorable bridge over River Tawi at Rajouri ..	14.94	3.00	11.94	11.94	
Const. of foot bridge on Potha ..	0.54	1.00	3.54	3.54	
Const. of Jhulla bridge between Nowshera Jawa Rajal over Nowshera Nallah ..	5.74	1.50	4.24	4.24	
Foot bridge over Reasi Nallah ..	2.50	0.89	1.61	1.61	
Foot bridge over Suah Tawi at Rajdhani ..	3.00	0.90	2.10	2.10	
Foot bridge over nallah Ans, at Kewal Seri ..	4.00	1.10	2.90	2.90	

	1	2	3	4	5	6
8. Foot bridge at Panjar Nallah at Thanamandi ..	0.75	0.72	0.10	0.10		
9. Const. of 200 span foot bridge over nallah Sewa at Kheru ..	3.00	0.90	2.10	0.10		
TOTAL (Bridges Rajouri Distt.)	41.96	14.49	31.54	31.54		
TOTAL (Works in progress Rajouri District) ..	205.04	85.92	71.60	71.60		

(B) New Works in Rajouri District :

(a) Basic Minimum Needs Programme ..	N.A.		60.32	60.32		
(b) Other New Works ..	N.A.		106.49	104.49		
TOTAL (New Works Rajouri District) ..	N.A.		166.81	166.81		
TOTAL (Works in Rajouri Distt.)	205.04	85.92	238.41	238.41		

VI. POONCH DISTRICT**(A) Works in Progress****(a) Upgrading :**

Imptt. to Poonch Main road ..	9.93	6.70	2.00	2.00		
TOTAL ..	9.93	6.70	2.00	2.00		

(b) Roads in backward Areas :

1. Const. of road from Plera to Loran Incl. const. of bridge ..	4.09	3.97	0.12	0.12		
3. Const. of Motorable road from Mandi to Sawjaina ..	4.25	1.14	1.61	1.61		
4. Const. of Bafliaz Dharmagala Pir Panchal road ..	3.00	1.12	1.88	1.88		
TOTAL ..	11.34	6.23	3.61	3.61		

(c) Other Rural Roads :

1. Mandi Sawanza Road beyond mile 4th (4 miles)	3.79	0.65	2.35	2.35		
2. Jhulla Bridge over River Poonch ..	0.40	0.30	0.10	0.10		
3. Mandi Harmodhki Road ..	4.20	0.40	3.00	3.00		
4. Bafliaz Behramgala road ..	3.00	0.50	1.70	1.70		
5. Shingling of road from Mandhar Bazar to School Building ..	0.30	0.25	0.05	0.05		
TOTAL (Other Rural roads)	11.69	2.10	7.20	7.20		

£Excludes estimated cost of new schemes.

1	2	3	4	5	6
(d) <i>Bridges:</i>					
1. Const. of Motorable Bridge at Bafiaz ..	13.00	9.18	3.88	3.88	
2. Bridge over River Betar Nallah at Poonch. ..	3.00	1.00	2.00	2.00	
TOTAL (Bridges Poonch Distt.) ..	16.06	10.18	5.88	5.88	
TOTAL (Works in Progress in Poonch Distt.) ..	49.02	25.21	18.69	18.69	

(B) NEW WORKS IN POONCH DISTT :

(a) Basic Minimum Needs Programme ..	N.A.	..	83.48	83.48	
(b) Other New Schemes ..	N.A.	..	25.78	25.78	
TOTAL (New Works in Poonch Distt) ..	N.A.	..	109.26	109.26	
TOTAL Works in Poonch District ..	49.02(£)	25.21	127.95	127.95	

1	2	3	4	5
VII <i>Other items:</i>				
(a) Roads Under C. R. Fund (State share) ..	10.00	..	10.00	10.00
(b) Estt. Surveys, Investigations, civil works, etc. ..	150.00	..	150.00	150.00
(c) Heavy Tools & Plants ..	50.00	..	150.00	150.00
TOTAL (Other Items) ..	210.00	..	210.00	210.00
TOTAL Roads and Buildings Jammu Province ..	2969.20(£)	788.17	1925.00	1925.00

£: Excludes estimated cost of New Schemes

2. Road Transport

The J&K Government Transport Undertaking caters to the need of the Army, Civil and the Public in respect of passengers and goods traffic to the possible extent. In view of expansion of roads in the State during the 4th Plan and proposed expansion during 5th Plan period the demand for buses and trucks to meet the requirement of the economy is bound to increase. For the 4th Plan an outlay of Rs. 350.00 lakhs was approved for this sector. The same has been utilised in full. The fleet of the undertaking which consisted of 308 buses and 792 trucks on 31-3-1968 is expected to have 508 buses and 732 trucks by the end of the 4th Plan.

For the 5th Five Year Plan an amount of Rs. 700 lakhs has been earmarked for this sector out of which Rs. 422 lakhs will be utilised for the expansion of the passenger fleet and Rs. 122 lakhs for expansion of the goods fleet. Besides, an amount of Rs. 124 lakhs will be spent on the establishment of the Central Workshop and expansion of Regional Workshop etc. The broad objectives of the various programmes included in the 5th plan are as under :

- (a) Addition of 70 buses for taking over of all passenger transport operation on National Highway of the State.
- (b) Addition of 240 buses for taking over of long distance Muffasil routes so as to remove the imbalance of 1 : 4 participation of G.T.U. to that of private sector and thus avoid uneconomic competition.
- (c) Addition of 150 buses to cope with the growth of traffic estimated at 6% per annum.

- (d) Addition of 160 trucks to cope with the increase in load of imports estimated at 50%.
- (e) Setting up Central/Regional workshops with adequate repairing facilities.
- (f) Providing adequate passenger amenities.
- (g) Construction of staff quarters
- (h) Re-organisation of the statistical/Planning unit and training of its personnel.

The addition of trucks will increase the strength of trucks with GTU to 892 and the over all number of trucks plying on the National Highway to 2092 (including 1200 civil trucks) as against the estimated requirement of 2320 trucks (i.e 1940 trucks on road +20% for workshop reserve).

Schemewise outlay for Road Transport for the Fifth Plan 1974-79

S. No.	Head/sub-head/scheme	Total estimate	Rs. in lakhs)		
			Anticipated Exp- ending 4th Plan	5th Plan approved outlay	
				Total	Foreign Capital Exchange
1	2	3	4	5	6
1.	Purchase of Buses:				
	a) For existing routes	91.25	138.00	138.00	4.00
	b) For new routes	115.38	284.00	284.00	4.00
	c) TOTAL (a & b)	206.63	422.00	422.00	8.00
2.	Purchase of trucks.	80.57	122.00	122.00	..
3.	Work shops including works on Building				
	a) Construction of buildings & purchase of lands ..	56.37	84.00	34.00	..
	b) Employment to Engineers/Technicians	..	20.00	20.00	..
	c) Tools and Plants	4.92	20.00	20.00	3.00

1	5	3	4	5	6	7
4. Staff Quarters. . .	..	20.00	20.00	..		
5. Other expenditure including purchase of auxiliary vehicles.						
a) Inspection and service vehicles . .	..	5.00	5.00	..		
b) Amenities to travelling public . .	1.12	4.00	4.00	..		
c) Training of personnel and re-organisation of Statistical and Plg. Cell . .	0.46	3.00	3.00	..		
TOTAL (Road Transport) . .	350.06	700.00	700.00	11.00		

FIFTH PLAN OUTLAY FOR ROAD TRANSPORT (PHYSICAL TARGETS)

Particulars	Unit	Base leave 1973-74	Fifth plan (1978-79) level
-------------	------	--------------------	----------------------------

1	2	3	4
1. Purchase of Buses	Nos	508	968
2. Purchase of Trucks	Nos	732	892

Fifth Plan 1974-79 Road Transport Employment (Manpower requirements)

S.No.	Category	5th Plan target
1	2	3

1. Engineering

A. Degree Holders.

(i) Mechanical with specialisation in Automobile Engineering.	4
---	---

B. Diploma Holders

(i) Mechanical	4
(ii) Automobile	16

C. Artisans (ITI trained)

70

2. Accounts

(i) Sr. Accountants	4
(ii) Jr. Accountants	12
(iii) Accounts Clerks	24

3. Clerical

(i) Superintendents	1
(ii) Head Assistants	4
(iii) Sr. Assistants	12
(iv) Jr. Assistants	24

4. Statistical

(i) Statistician	1
(ii) Statistical Assistants	4
(iii) Jr. Statistical Assistants	10
(iv) Investigators	...

5. Others

(i) Managerial	2
(ii) Executive	2
(iii) Drivers	676
(iv) Conductors	500
(v) Cleaners	175
(vi) Semi Skilled	50

6. Class IV Categories

8

3. Tourism

Tourism has an important place in the economic life of the State. Expansion of tourism directly leads to increased activity in many sectors of the economy and generation of employment. Due to coming into operation of the faster means of communication the flow of foreign tourists visiting the State is expected to increase at a rapid pace. It is proposed to promote tourism in a way that provides maximum economic advantage to the State. The improvement in facilities, quality of services and infrastructure will be promoted in a way that private capital in the State is invested in this sector in a big way.

IV Plan Achievements

The allocation for the tourism for the IVth Plan was Rs. 370 lakhs which will be utilised in full on the construction of rest houses at important places, survey and projecting for new development schemes, development of Tourist resorts, development of ancient monuments, arrangement of better facilities for the pilgrims of Vaischno Devi and Amarnath Ji etc. etc. As a result of all these activities the number of tourists increased from 3.58 lakhs in the year 1969 to 4.75 lakhs in the year 1972. The year 1973 is expected to record a higher figure. Thus the target set for the 4th Plan of attracting more tourists to the State has substantially been achieved.

Fifth Five Year Plan

The field of activity in the Fifth Five

Year Plan would be :—

- (a) implementation of master Plans.
- (b) stabilizing and improving the infrastructure already provided so far.
- (c) developing infrastructure in more areas.

The preparation of master plans of various resorts has been completed during the Fourth Five Year Plan period. During the 5th Plan concrete shape will be given to these in consultation with Town Planners. Providing of infrastructure such as roads, electricity, water supply at different places like Pahalgam, Gulmarg, Kokernag, Daksum, Yusmarg etc. etc. will be taken up during the Fifth Plan. Other resorts which were not taken up for development at all in the past from the tourist point of view will also be considered for development. Among these are Bungas, Lolab Valley, Shikargah, Wular Lake area in Kashmir province and Patni Top, Sana-sar, Tatapani-Gool-Niabat, Surinsar and Mansar in Jammu division will be given priority. This will help to stagger the tourist traffic in the Valley and ensure the stay of tourists for a longer period at places other than the main tourist resorts and disperse economic advantages flowing from tourism over wider areas.

Role of Public and Private Sector

In other countries the Private sector has a very large share in the development of tourist facilities. In fact it is the private sector which derives maximum, if not the entire benefit, from this industry. A cons-

cious effort is therefore being made to involve the private sector in this endeavour.

Improvement of Dal Lake in the Srinagar City is a very important task for the 5th Plan. The world famous houseboat industry which has been flourishing in the State for the last many years is facing grave difficulty of disposal of houseboat sewage. With the introduction of saintary fittings in the houseboats the Dal Lake is increasingly getting polluted. This problem will be solved to the possible extent.

Camping, Trekking and Mountaineering

Some of the important aspects of Tourism promotion of our State, like; camping, trekking and mountaineering have not received full attention so far. This aspect of tourism has a vast potential. The areas already selected for the purpose are :—

- (1) Pahalgam-Amarnathji
- (2) Pahalgam-Kolahoi-Tarsar-Marsar
- (3) Naranag-Gangabal
- (4) Aharbal-Kounsernag.

Under the new schemes Bhaderwah, Kishtwar and Wadwan are intended to be developed for purpose of trekking and hunting. There are many one day treks in the State which can be developed and used easily and speedily. All these short distance treks are proposed to be developed by providing basic minimum facilities.

Targets

The allocation for Tourism for the period of 5th Plan has been fixed at Rs.600 lakhs against the 4th Plan outlay of Rs. 370 lakhs. With concerted efforts, publicity and necessary infrastructure the goal is to attract 5 lakh tourists by the end of the Fifth Plan. The spendings of the tourists during this period are estimated to be as under :—

	No. of Visitors	Per capita expenditure	Total expenditure
1/Foreign Tourists	80,000	Rs 750.00	Rs. 6 crores
2/Indian Tourists	4,20,000	Rs. 500.00	Rs. 21 crores
Total:	5,00,000		Rs 27 crores

TOURISM

Schemewise outlay for the Fifth Plan (1974-75)

(Rs in Lakhs)

5th Plan outlay

Anticipated exp.
IV Plan

No.	Scheme	2	3	4	5
Jammu Province:					
	Development of Dal Lake Area	155.088	25.00	25.00	
	Development of Nagin Lake Area	12.042	10.00	10.00	
	Development of Mansbal Lake Area	2.910	10.00	10.00	
	Development of Gulmarg	..	62.350	110.00	110.00
	Development of Tangmarg	..	0.003	2.50	2.50
	Development of Pahalgam	..	5.621	40.00	40.00
	Development of Kokernag	..	17.922	20.00	20.00
	Development of Daksum	..	3.173	15.00	15.00
	Development of Achhabal	..	2.200	10.00	10.00
	Development of Verinagh	..	3.360	5.00	5.00
	Development of Yasmarg	..	0.260	5.00	5.00
	Development of Sonamarg	..	1.950	8.00	8.00
	Development of Aharbal	..	0.300	5.00	5.00
	Development of Shikargarb Trail	..	2.500	2.50	2.50
	Development of Ancient Monuments	..	0.370	6.00	6.00
	Development of Rustamgarhi complex	..	4.820	5.00	5.00
	Sonnt Lumeri Shalimar	..	6.170	3.00	3.00
	Development of Golf Courses	..	5.200	6.00	6.00
	Civil Works and Beautification in and around Srinagar	..	11.904	4.00	4.00
	Development of Treks in and around Valley	..	5.130	5.00	5.00
	Mountaineering, Skiing and Aquatic Sports Wing	..	0.800	10.00	10.00
	Development of Wular Lake area	..	..	5.00	5.00
	Development of Lolab and Bungus Valley	..	..	5.00	5.00
	Development of Ganderbal	..	..	3.00	3.00
	Development of Mattan Aishmuqam	..	2.00	6.00	6.00
	Amar Nath Ji Yatra Arrangements	..	14.740	10.00	10.00
	Winter Sports Gulmarg	..	8.830	8.00	8.00
	Deweeding of Dal Lake	..	0.120	2.00	2.00

1	2	3	4	5
29.	Disposal of Mouse-boat Sewage	..	5.00	5.00
30.	Water Supply to House-boats	1.000	5.00	5.00
31.	Purchase of Diesel Generating sets	0.420	2.00	2.00
32.	Plantation Programme	1.230	..	..

Jammu Province :

1.	Development of Jammu	..	27.710	13.00	13.00
2.	Development of Katra	..	17.740	20.00	20.00
3.	Development of Patni-Sanasar area	..	6.450	20.00	20.00
4.	Development of Kishtwar and Bhaderwah area	..	0.960	10.00	10.00
5.	Development of Mansar Surinsar Area	..	1.850	25.00	25.00
6.	Development of Sud-Mahadev area	..	1.650	5.00	5.00
7.	Development of New Tourist Spots	..	..	7.00	7.00

COMMON ITEMS:

1.	Survey and Projecting	..	15.450	10.00	10.00
2.	Development of Tourist facilities on National Highway	..	6.930	10.00	10.00
3.	J & K Development Corporation	..	35.000	35.00	35.00
4.	Incentive and Subsidy to Private Sector	..	1.740	20.00	20.00
5.	Publicity/Film Publicity	..	21.310	40.00	40.00
6.	Strengthening of Tourism Organization, opening of new tourist Office at important cities in the country-supply of information and other tourist facilities	..	1.440	20.00	20.00
7.	Purchase of Equipment for Tourist establishment	..	7.240	10.00	10.00
8.	Training Programme	..	0.150	5.00	5.00
GRAND TOTAL			471.939	600.00	600.00

Chapter X

Social Services

I. General Education

A) ELEMENTARY EDUCATION

The State of Jammu and Kashmir is one of the most backward States of India in the field of Education. Its literacy percentage (only 18.6%) is lower than that of any other State except Dadra, Nagar Haveli and NEFA. Since a considerable percentage of its population is backward both educationally and economically, it is indeed a stupendous task to achieve the target of universal enrolment at elementary stage and a still greater problem to retain the enrolled children in schools to complete even the primary course.

PRIORITIES

The development strategy for the plan in the field of elementary education is based upon the following priorities.

(a) *Universality of School Provision*

The provision of primary and middle schools within easy walking distance from the home of every child will be the first major Programme to be developed in this connection. For lack of proper transport facilities, due to difficult terrain and natural obstacles as also dispersed population in the hilly areas, relaxations will have to be made in the National Develop-

ment Council's prescribed norm of having a primary school within a radius of 1.5 km and a middle school within a radius of 5 kms. to 1 km. and 3 kms. respectively.

(b) *Universal Enrolment*

A number of incentives like free text books, midday meals free clothing and attendance scholarships for girls will be provided to achieve the goal of universal education. To accelerate the enrolment a special drive will also be organised at the beginning of the school year, through teachers and supervisors, helped by the community leaders to bring more and more children to our schools.

(c) *Universal Retention*

Of a particular importance will be the reduction of the incidence of stagnation and wastage vigorous steps will be taken to combat both these evils.

Enrolment

The projected population in the age-group 6—11, by the end of 1973-74 is estimated at 6.35 lakhs. The anticipated enrolment for this age group by the end of the 4th plan is 4.61 lakhs thus covering 73% of the school going children. Similarly in the age group of 11—14 it is expected

to achieve a target of 1.31 lakhs covering only 38% of the children by the end of the 4th Plan.

Enrolment targets in the classes I—VIII during the 5th plan are as under :—

A. Classes I-V/ Age group 6-11 ..	Boys	Girls	Total
1. Population in 1978-79 (in lacs)	3.48	3.31	6.79
2. Percentage to be enrolled in 1978-79 ..	107%	92%	100%
3. Enrolment in 1978-79 (in lakhs)	3.74	3.05	6.79
4. Enrolment in 1973-74 (in lakhs)	3.04	1.57	4.61
5. Addl. enrolment targets during 5th plan (in lakhs) ..	0.70	1.48	2.18
6. Addl. enrolment during IV Plan 1969-74 (in lakhs) ..	0.48	0.52	1.00

B. Classes vi-viii/ Age group 11-14

1. Population in 1978-79 (in lakhs)	2.02	1.84	3.86
2. Percentage to be enrolled in 78-79	56%	43%	50%
3. Enrolment in 1978-79 (in lakhs)	1.14	0.79	1.93
4. Enrolment in 1973-74 (in lakhs)	0.89	0.42	1.31
5. Addl. enrolment target during 5th plan 1974-75 (in lakhs)	0.25	0.37	0.62
6. Addl. enrolment during the 4th Plan ..	0.14	0.12	0.26

The enrolment during the 5th Plan period has been phased as under :

Phasing of enrolment at Elementary Stage During 5th Plan Period (In Lakhs)

Year	I—V Classes			Level of enrolment		
	Additional enrolment			Level of enrolment		
	Boys	Girls	Total	Boys	Girls	Total
1973-74 ..	..	..	..	3.04	1.57	4.61
1974-75	0.10	0.20	0.30	3.14	1.77	4.91
1975-76	0.12	0.24	0.36	3.26	2.01	5.27
1976-77	0.14	0.29	0.43	3.40	2.30	5.70
1977-78	0.16	0.35	0.51	3.56	2.65	6.21
1978-79	0.18	0.40	0.58	3.74	3.05	6.79

Total 0.70 1.48 2.18

Year	vi—viii Classes			Level of enrolment		
	Boys	Girls	Total	Boys	Girls	Total
1973-74 ..	..	..	..	0.89	0.42	1.31
1974-75	0.03	0.04	0.07	0.92	0.46	1.38
1975-76	0.04	0.06	0.10	0.96	0.52	1.48
1976-77	0.05	0.08	0.13	1.01	0.60	1.61
1977-78	0.06	0.09	0.15	1.07	0.69	1.76
1978-79	0.07	0.10	0.17	1.14	0.79	1.93

TOTAL 0.25 0.37 0.62

Provision of schools

By the end of the 4th Plan period the State will have 6063 primary schools and 1476 middle schools. During the 5th Plan it is proposed to open 1000 primary schools (200 schools every year) in order to cover school-less habitations (2000 habitations with population of 200 to 600) and 250 schools @ 50 schools per year) will be upgraded to the middle standard (addition of 6th class) in accordance with the educational needs of various areas and communities. In addition, 7th and 8th classes will also be added to 50 schools each which already stand upgraded to 6th or 7th standard during the 5th plan period every year.

Arrangements are also proposed to be made part-time and continuation courses for students in the age group of 11—14. Assuming that in addition to full time courses 20,000 pupils will be covered by these courses in the age group of 11—14, the enrolment targets will be as under :—

Classes VI-VIII/age group 11—14

Type of courses	Boys	Girls	Total
1. Full time course	25000	37000	62000
2. Part time course	5000	5000	10000
3. Continuation courses	5000	5000	10000
Total targets	35000	47000	82000

Teacher Requirements

In spite of the fact that new educational facilities will be provided in the sparsely populated areas where a full complement of students may not always be available for the additional teachers, the teacher-pupil ratio of 1 : 35 at primary stage and 1 : 30 at middle stage has been adopted as compared to the present ratio of 1 : 36 in primary stage and 1:26 in middle stage.

As compared to the teachers appointed during the last two years of 4th Plan i.e. 1972-73 and 1973-74 (6000 teachers) enrolment has not increased proportionately. It has been assumed that for 20% of the additional enrolment during 5th Plan period no additional teachers need be provided and the existing facilities will be utilised to the optimum level.

Requirement of Teachers at Elementary Stage.

	I - V classes	VI - VIII classes
(a) Total additional enrolment	2.18 lakhs	0.62 lakhs
(b) Less 20% to be absorbed by the existing capacity	0.43 lakhs	0.12 lakhs
(c) Addl. enrolment for which provision is to be made	1.75 lakhs	0.50 lakhs
(d) Teacher-pupil ratio	1 : 35	1 : 30
(e) Number of teachers required for 5 years	5000	1700

Every year 400 teachers are expected to be appointed for opening and upgrading of schools and 940 for additional enrolment at primary and middle stages of education.

In case of part-time and continuation courses the requirements of teachers will be as under .—

Type of course	Classes VI-VIII		
	Enrolment	Teacher pupil ratio	Requirement of teachers
Part-time courses	10000	1 : 50	200
Continuation courses	10000	1 : 44	225

Requirement of Teachers Training Places

The total number of untrained teachers at the elementary stage will be about 4600 by the end of 1973-74. Besides about 360 teachers every year will be appointed for replacement assuming the attribution rate of 2% p.a. In order to have almost 100% trained teachers by the end of 5th Plan period at the elementary stage the requirement of training places will be as under :—

1. Present backlog of untrained teachers	4500
2. New appointment on account of replacement @ 2% p.a.	1600
3. Addl. teachers to be appointed for fulltime courses	6700
4. Addl. teachers to be appointed for continuation courses	200
Total training places required	13000
Present intake capacity of T.T. schools (@ 2000 per year)	10000
Requirement of additional Training places	3000

The additional 3000 teachers will be trained at four District Teachers Training Institutes with a capacity of 150-200 each year. The Sahay Committee has recommended the establishment of an Institute in each district (10 in all).

Building Programmes

It is proposed to construct 600 rooms @ Rs. 5000 for one room for primary/middle schools. An amount of Rs. 10.00 lakhs will be provided to meet the requirements of the matching grants to encourage local initiative in putting up buildings for schools. Additional amount of Rs. 10.00 lakhs will also be provided to complete

Works in progress of the 4th Plan. The total cost under this head would be as under :—

	5th Plan
Works in Progress	10.00 lakhs
New Constructions	30.00 lakhs
Construction under local initiative	10.00 lakhs
Total	50.00 lakhs

Funds have been provided for conversion of the existing T. T. Schools into District Training Institutes and construction of quarters for women teachers.

Programmes

Work Experience Programmes

The Work Experience Programmes are expected to assume great importance and it is proposed to progressively cover 10 middle school every year initially in the 6th class in the 1st year (for about 50 students) and extending it to the next higher classes in subsequent years. Special training will be provided to two teachers in each school under this programme and they will be paid an allowance of Rs. 50/ p.m.

The converage of students under this programme during the 5th Plan period (6th, 7th and 8th classes) will be as under ;

Year	No. of students
1974-75	500
1975-76	1500
1976-77	3000
1977-78	4500
1978-79	6000
Total	15500

The total expenditure on this pro-

gramme will be as under :—

(a) Recurring expenditure

Allowance to Instructors	0.18 lakhs
Cantingencies, tools & kits	2.32 lakhs
(@ Rs. 15/- per student per year)	
Total	2.50 lakhs

(b) Non-recurring expenditure

Construction of sheds (@ 6000 per school)	3.00 lakhs
Equipment and other appliances (@ Rs. 2000 per school)	1.00 lakhs
Training of Instructors (20 every year with stipend of Rs. 150/- p.m.)	2.30 lakhs
Total (a & b)	8.80 lakhs

Mid day meals

It will be implemented under Nutrition Programmes separately.

Free supply of Text Books and Stationery

It is also proposed to cover 10,000 students at primary stage and 5000 students at middle stage every year under this programme. The cost of providing text books and writing materials has been assumed as Rs. 5/- per pupil in classes I—V and Rs. 10/- per pupil in classes VI—VIII. During the 5th Plan this programme will cost :—

	5th Plan
Primary stage (50000 students)	2.50-lakhs
Middle stage (25000 students)	2.50 lakhs
Total	5.00 lakhs

Girls Education Programmes

Free clothing and attendance scholarships will be provided to promote the enrolment of girls. Uniform allowance has been assumed at Rs. 10/ per girl and the rate of attendance scholarships as Rs. 30/- per girl per annum. The total cost on this account for 2000 girls (to be repeated every year) will come to Rs. 4.00 lakhs.

Special Programmes for Hill Areas and Scheduled Castes

Seasonal type schools for backward Bakarwals population and Residential type schools for children from specially backward areas are planned to be opened during the 5th Plan. In addition special incentives would be provided to the pupils belonging to scheduled castes and pupils coming from border areas. The cost of these programmes will be as under:—

(a) *Seasonal type schools (five every year)*

1. Recurring Costs

Salaries	2.10 lakhs
Contingencies (Rs. 600/- per year per school)	0.45 lakhs
Total	2.55 lakhs

2. Non-recurring costs

Tent teaching aid (Rs. 500/- per school)	0.15 lakhs
Total	2.70 lakhs

Residential Schools.

Two Ashram type residential schools will be set up at for students from specially backward areas of the State with in-take of 100 resident-students one in 1975-76 and other in 1977-78. Free board-

ing and lodging will be provided to the students in the First Year of the Plan during Fifth Plan. A provision of Rs. 2.50 lakhs has been made.

It is proposed to cover 500 students per year (2500 in 5th Plan) under this programme by providing them scholarships @ Rs. 20 p.m. The total cost of this programme comes to Rs. 5.00 lakhs in 5th Plan.

Improvement of Elementary Schools

Because of heavy stress on expansion, most of the primary schools are very poorly equipped which adversely effect the quality of education and increase the incidence of wastage and stagnation. It is proposed to have a scheme of general Improvement of all viable elementary schools and for this purpose an amount of Rs. 10.00 lakhs has been kept. About 2000 schools (@ Rs. 500/- per school) would be covered during the 5th Plan.

Promotion of Science Teaching

To encourage teaching of science in the schools it is proposed to provide science kits (@ Rs. 100/- each) to 1000 schools every year with the assistance of UNICEF at the cost of Rs. 5.00 lakhs during the 5th Plan.

Condensed Courses for Women Teachers

A good deal of difficulty in faced in deploying lady teachers from Urban areas to far flung backward and boarder areas. The scheme of selecting the local women and awarding them scholarships to undertake studies in the cities and afterwards becoming teachers in their own localities has proved successful during the IVth plan. It is therefore, proposed to continue this scheme in 5th Plan also. Selection of 40 lady teachers per year @ Rs. 500/- each under this scheme entails an outlay of Rs. 1.00 lakhs in the 5th Plan.

NORMS FOR OPENING AND UPGRADING OF ELEMENTARY SCHOOLS

A. Opening of a primary school

Provision of staff :
Teacher (one)

Provision of Contingencies :
Recurring Rs. 500/-
Non-recurring Rs. 600/-

B. Upgrading of primary schools to Middle Standard

(a) Addition of class 6th

Provision of staff :
Teacher (one)

Provision of Contingencies :
Recurring Rs. 500/-
Non-Recurring Rs. 600/-

(b) Addition of class 7th

Provision of staff :
Teacher (one)

Contingencies :
Recurring Rs. 500/-
Non-recurring Rs. 600/-

(c) Addition of class 8th

Provision of staff ;
Teacher (one)
Teacher (one)

Provision of Contingencies
Recurring Rs. 1000/-
Non-recurring Rs. 1500/-

SECONDARY EDUCATION

Priorities for Fifth Five Year Plan

Keeping in view the achievements expected upto the end of the Fourth Plan

and the task which is to be completed during the coming 15 years or so, the following programmes will be given priority during the Fifth Plan.

I. Expansion of Education and Equalisation of Educational Opportunities

While every effort will be made for the provision of facilities for normal expansion of enrolment at this stage, a high priority will be given to the opening of new secondary schools in the backward areas and to the enrolment of girls and children of weaker sections.

II. Introduction of New Pattern of Secondary Education

Top priority will be assigned to the adoption of the new pattern of secondary education (10+2+3) as recommended by the Sahay Committee on Education in a phased manner during the 5th Plan.

III. Vocationalisation of Secondary Education

To reduce pressure on university admissions, priority will be given to re-arrange the school programme in such manner that a good number of students go in for vocational courses.

IV. Qualitative Improvement

A high priority will be given to the improvement of curricula, text books, methods of teaching and evaluation, teacher-education both in-service and preservice, teaching of new mathematics and new science; audio-visual aids including TV and vocational guidance and research.

V. Buildings and other Physical Facilities

Priority will also be given to the provision of libraries and laboratories, Science equipment, furniture for schools and build-

dings situated in backward areas, especially where help from local community may not be forthcoming on account of their poverty.

A—Programme of Expansion

(a) Enrolment

The enrolment at the secondary stage has shown the highest rate of growth in the field of general education as indicated in the following tables :—

Table I. Enrolment at Secondary Stage.

Year	Enrolment (IX-XI Classes) (in lakhs)			Enrolment ratio (11-14 age group) (In percentage)		
	Boys	Girls	Total	Boys	Girls	Total
1950-51	0.053	0.003	0.06	5	1	3
1955-56	0.11	0.02	0.13	10	2	6
1960-61	0.17	0.05	0.22	14	5	10
1965-66	0.33	0.08	0.41	25	7	16
1968-69	0.41	0.10	0.51	28	9	19
1973-74 (Target)	0.60	0.18	0.78	36	12	25

The following table indicates the additional enrolment and average annual rates of growth from 1950-51 onwards :

Table II. Additional enrolment and average annual rates of growth (IX—XI Classes)

Plan	Additional Enrolment (in lakhs)			Average annual growth rate (simple rate) of enrolment		
	Boys	Girls	Total	Boys	Girls	Total
I Plan	0.06	0.02	0.08	24.0	113.0	27.5
II Plan	0.06	0.03	0.09	10.9	30.0	13.8
III Plan	0.16	0.03	0.19	18.8	12.0	17.3
Three Annual Plans	0.08	0.02	0.10	8.1	8.0	8.0
IV Plan (Est.)	0.19	0.08	0.27	9.3	16.0	10.6
V Plan (Target)	0.35	0.10	0.45	11.60	10.60	11.60

Keeping these trends in view and also considering the growth in enrolment during the 4th Plan the enrolment in 5th Plan has been estimated as under :—

Table III—Phasing of enrolment IX-XI classes during the Fifth Five Year Plan, (in lakhs)

Year	Additional Enrolment			Level of Total Enrolment		
	Boys	Girls	Total	Boys	Girls	Total
1973-74	—	—	—	0.60	0.18	0.78
1974-75	0.05	0.02	0.07	0.65	0.20	0.85
1975-76	0.06	0.02	0.08	0.71	0.22	0.93
1976-77	0.07	0.02	0.09	0.78	0.24	1.02
1977-78	0.08	0.02	0.10	0.86	0.26	1.12
1978-79	0.09	0.02	0.11	0.95	0.28	1.23
Total	0.35	0.10	0.45			

B. Provision of Places

During 1971-72, the total number of secondary schools (lower High, High and Higher Secondary Schools) both under Government at Non-government sectors was 577 out of which 451 were for boys and 126 girls.

At present there is no big village, town or tehsil which is without secondary school of its own. However, during the 5th Plan special care will be taken of the needs of the backward areas and spread of education among girls. At the same time the principle of 'Proximity' will not be an overriding consideration. The emphasis will shift to the establishment of 'Optimum sized' institutions which will be more economic and efficient. Efforts will also be made to rationalise the existing schools by a process of consolidation in areas where schools have already proliferated and are creating problems of overlap or duplication.

C. Requirements of Teachers

For additional enrolment at secondary stage, the requirement of teachers have been worked out on the following basis:

Requirement of teachers during the 5th Plan at secondary stage

(a) Additional enrolment during 5th Plan	45,000
(b) Teacher-pupil ratio	1:25
(c) Number of teachers required (1974-79)	1800

Out of the total requirement of 1800 teachers, 600 would be utilised for upgrading of schools to high standard. Every year 360 teachers will be employed for this stage (140 for upgrading and 220 for additional enrolment in existing schools.)

Requirements of Teachers Training Places

By the end of 4th plan there will be about 90% trained teachers at this stage leaving about 1000 untrained teachers. In order to have cent percent trained teachers at secondary stage the in-take capacity of T. T. Colleges is required to be kept at 700 as shown below :—

(a) Teachers to be appointed under Plan	1800
(b) Teachers to be appointed on account of replacements (@ 2% p. a.)	700
(c) Extent of backlog by the end of 4th Plan	100
(d) Total number of teachers to be trained during 5th Plan	3500
(e) In-take capacity for B. Ed course (about 700 per year)	3500
(f) Requirement for additional places	Nil.

Construction Programmes

Majority of our schools are at present without adequate buildings. Most of them are in delapidated conditions and require immediate repair. Moreover accommodation would also be required for additional immediate repair. Moreover accommodation 5th Plan would be as under :—

- (i) completion of work-in-progress
- ii) construction of 300 rooms in high schools at a cost of Rs. 5000/- each,
- (iii) provision of Rs. 10.00 lakhs would be provided to give matching grants to encourage local initiative in putting up buildings for schools.

Total financial implications of all these programmes would come to :—

	5th Plan
Works in progress	15.00 lakhs
New Construction	15.00 „
Constt. under local initiative	10.00 „
Total	40.00

Programmes of Qualitative Improvement

Teacher Education Programmes

These have been separately included under the Teacher Education Sector.

Development of Science Education

(a) Introduction of Science in High Schools

At present almost all high and higher secondary schools have facilities for teaching of Science. It is also proposed to introduce science in the newly upgraded schools (60 in all : 15 per year from 1975 to 1979). Provision for laboratory assistants has been made

(b) In-service Training of Science Teachers.

A sum of Rs. 1.00 lakhs would be needed for in-service training of 250 teachers (50 per year) @ 400/- per head during the Vth Plan period.

(c) Improvement of Laboratories with UNICEF assistance.

The laboratory facilities that are available at present in our schools are to inadequate. There is hardly any laboratory which is well equipped and does not need urgent improvement. It is, therefore, proposed to cover at least 50 schools every year (total 250) by providing them science equipment worth Rs. 2,000 each with the help of UNICEF.

(d) Provision of Laboratory Assistants.

In addition, it is proposed to provide 150 Laboratory Assistants in a phased programme to selected schools. In the first year 50 Secondary Schools would be covered under this programme and 100 more will be covered subsequently 25% schools per year.

Other Programmes of Improvement

(a) Provision of Library Assistants

150 Library Assistants to organise the Libraries on proper lines and to create interest among the students will be provided in big secondary schools. Total cost of this programme is estimated to be Rs. 18.00 lakhs during 5th Plan.

(b) Provision of Accounts Clerks

The secondary schools are badly handicapped for want of trained clerks to deal with the matters relating to accounts. It is proposed to provide one accounts clerk

to 150 schools in a phased programme. This programme will entail a financial outlay of Rs. 14.00 lakhs during 5th Plan.

Subject Specialists

It is essential to lay greater emphasis on academic guidance in addition to administrative supervision. It is proposed to provide 10 Subject Specialists (2 per year) for different subjects at Provincial/District levels. This programme is estimated to cost Rs. 2.00 lakhs in the 5th Plan.

IV. Scholarships

To enable the poor and meritorious students to pursue their studies, it is proposed to provide Rs. 30.00 lakhs as scholarships in the 5th Plan compared to Rs. 20.00 lakhs in the 4th Plan period.

Vocationalisation of Secondary Education

As suggested by the Sahay Committee the scheme for Vocationalisation of Courses at secondary stage has been accepted. Advance action has already been initiated in this regard and a full fledged Directorate set up in the Education Department to take up this work. It is proposed to give vocational bias to 50 existing schools by appointing the necessary staff for courses in Stenography, Secretarial practice, Home Science, Book-Keeping and Accounts and other related vocations. This programme will be phased in such a manner that every year 10 schools would be covered. Staff required will be arranged out of the proposed expansion scheme. The total cost of vocationalisation will come to Rs. 20.00 lakhs as shown below:—

(a) Recurring

5th Plan

Staff (500)
Contingencies

Rs. 7.50 lakhs

Total

Rs. 7.50 „

(b) <i>Non-recurring</i>		
Buildings	Rs. 7.50	„
Equipment	Rs. 5.00	„
Total	Rs. 12.50	„

Total (a and b) Rs. 20.00 lakhs each

Adoption of 10+2 Pattern of Secondary Education

The State has already accepted the new pattern of 10+2+3 of education as recommended by the Sahay Committee as also laid down in the National policy of Education.

In our State implementation of this new pattern can be summed up as under :

(a) The school stage will cover a period of 12 years and will be divided into 10+2.

(b) At the under graduate stage we will have a pass course of two years and an honours course of 3 years.

(c) Post Graduate course will cover period of two years after the honours degree.

Financial Implications

As re-structuring of education eventually involves the transfer of PUC and 1st Year TDC as well from colleges to schools, the enrolment will increase abnormally in the higher secondary schools. In addition to the costs involved in switching over to the new pattern provision will have to be made for this additional enrolment. The State has already taken advance action for transfer of PUC from colleges to schools from April 1974 and 1st Year of TDC subsequently.

It has been decided to make suitable arrangements for this change in the existing Higher secondary schools and upgrade additional 8 high schools to new pat-

tern of higher secondary schools. The total cost on this programme during Fifth Plan would be Rs. 310.00 lakhs.

ANNEXURE

A. Norms for upgrading a Middle School to High Standard

(a) <i>Provision of staff</i>	<i>Grade</i>	
(i) Headmaster	One	475-850
(ii) Masters	Four	340-700
(iii) Teachers	Two	220-430
(iv) Physical Instructor	One	220-430
(v) Clerk	One	200-320
(vi) Orderly	One	170-230

(b) *Provision of Contingencies*

Recurring	Rs. 2,000/-
Non-recurring	Rs. 2,000/-

B. Norms for Introduction of Subject of Science in a High School

(a) *Provision of staff*

(i) Science Teacher	One	340-700
(ii) Lab. Assistant	One	200-320

(b) *Provision of Contingencies*

Recurring	Rs. 1,000/-
Non-recurring	Rs. 4,000/-

(d) *University Education*

The University Education has a crucial role to play in the task of producing enlightened and educated leadership, and hence the Planning of Higher Education and the implementation of the various programmes pertaining to its development have to be undertaken with utmost care.

Priorities for 5th Plan

Keeping in view the present state of Higher Education and the long term needs

of socio-economic development of the State, following schematic priorities will be followed during the Fifth plan period.

1. Consolidation and Improvement.

Greater emphasis will be laid on the improvement and consolidation of higher education facilities rather than on expansion. The important constituents of this programme will be :—

(a) Improving and expanding post-graduate education and research by providing accelerated assistance to University Departments for improving their physical and academic facilities.

(b) Improving the teacher competence by providing better facilities like housing, health schemes, seminars, refresher courses and other incentives to improve their academic and professional competence.

(c) Providing adequate assistance to affiliated colleges selected on the basis of their performance in academic and co-curricular fields.

(d) Expanding programmes of identifying and nurturing talent through Scholarships and other financial concessions. The accent will be on the provision of scholarships for students belonging to rural areas and economically and socially backward communities.

2. Employment Orientation.

Efforts will be made to restructure the curriculum so as to introduce vocationalisation. Emphasis will be laid on science and professional education and participation of students in productive activities.

3. Student Services.

Schemes will be launched to provide basic minimum facilities to the students like health centres hostels and non-resident student centres.

4. Provision for additional enrolment.

Among other programmes, it will include introduction of Honours Courses, Opening of Evening Colleges, introduction of Correspondance Courses and Part time Courses. Special incentives will also be provided to the under privileged groups like scheduled casts, first generation learners, and backward and border areas students to go in for higher education.

Enrolment

There has been considerable expansion in the field of higher education during the post-independence period. Stage-wise enrolment under general education is indicated below :—

Table I : Stage-wise enrolment in High Education (General Education only)

Year	PCU/Inter	Graduates	Post Graduates	Total
1950-51	1984	686	7	2677
1955-56	3693	1240	72	5005
1960-61	3294	1706	174	8164
1965-66	4324	6187	689	11200
1968-69	6263	9907	1193	7853
1970-71 (Prov.)	7213	14656	1250	28119
1973-74 (Target)	10240	23770	1716	35726

From the above Table it is clear that increase in the total enrolment would be more than thirteen times by the end of 4th Plan i.e. from 1950-51 to 1973-74.

Enrolment Projections for 5th Five Year Plan.

For projecting enrolment in the 5th Plan, it has been assumed that.

(a) The effect of any policy of restrictive admissions at the higher education stage would be only marginal in character.

(b) The rate of expansion observed during the earlier years would continue during the period of 5th Plan.

(c) To the extent, the enrolment in P.U.C. is taken over by the institutions at the School level, the enrolment in higher education would be reduced correspondingly. As for the eventual transfer of 1st year T.D.C. to Schools, it would have only a marginal effect as Honours Courses will be introduced in different subjects.

(d) In addition to regular courses, increasing facilities will be provided for correspondence and evening Courses.

In order to estimate the enrolment during 5th Plan i. e. 1974-75 to 1978-79, projections have been made for separate stages of higher education as under :—

Table II: Enrolment Projections in General education during 5th Plan at University stage :

Year	PUC	Graduates.	Post Graduates.	Total
1973-74	10,240	23,770	17,16	35,726
1974-75	11,450	26,210	18,92	39,552
1975-76	12,760	29,500	2,088	44,348
1976-77	14,230	33,760	2,304	50,294
1977-78	15,870	39,250	2,542	57,662
1978-79	17,700	46,040	2,805	66,545

From the above it has been reckoned that the number of students in Arts and Science including P. U. C. would rise from 35.73 thousand in 1973-74 to 66.55 thousand by 1978-79. Thus, the number of additional students during the 5th Plan period would be 30,819 compared to 4th Plan figure of 18,473.

The class-wise figures would be as under :—

Table III: Additional enrolment during 5th Plan as compared to 4th Plan.

Stage	Enrolment in 1973-74	Enrolment in 1978-79	Additional Enrolment in 5th Plan	Additional Enrolment in 4th Plan
PUC	102,40	177,00	7460	3,987
Graduates	23,770	46,040	22,270	13,813
Post Graduates.	1,715	2,805	1,089	523
Total	35,726	66,545	30,819	28,373

Presuming that PUC will be shifted to School-stage the bulk of the additional enrolment of 23,859 (Graduates and Post Graduates) will have to be accommodated in Colleges and Universities. As the Educational facilities at Post-Graduates level are only provided by the two Universities of our State, provision has to be made for additional 22,270 (say 22 thousand) students in the college in addition to the existing facilities. At present there are about 24,000 students in the colleges, after Fifth Plan this number is likely to be doubled. It means the present facilities would have to be doubled.

In the light of the recommendations of the Kothari Commission, it is proposed that facilities for, part time and own-time education will be expanded in the Fifth Plan so as to cover as many as 4,000 students. Accordingly, at graduate level about 4,000 students would be provided facilities of correspondence courses. The proposed distribution is as under :—

Regular Colleges	18,000
Correspondance courses	4,000
Total	22,000

In order to utilise the existing facilities to the maximum possible level, it is proposed to start evening shifts in colleges during the Fifth Plan period.

Teacher Requirements

At present there are about 1,200 teachers in colleges for General Education. During the Fifth Plan period 1,175 additional teachers may be required. This requirement is based upon the teacher pupil ratio 1 : 20 and for regular enrolment at P.U.C. and graduate stages only as under:—

Requirement of Teachers at College Stage

Year	P.U.C. Level	Graduate Level	Total
1974-75	45	130	175
1975-76	50	150	200
1976-77	55	180	235
1977-78	60	210	270
1978-79	65	230	295
	—	—	—
Total	275	900	1,175
	—	—	—

As P.U.C. and T.D.C. (I) are to be shifted to Higher Secondary Schools in a phased programme, proposals have been formulated in such a manner that the teaching staff will not become surplus at any stage. No staff would be appointed for P. U. C. stage but only for graduate stage (900 teachers out of 1,175). This requirement is, however, tentative and may get further reduced.

Grants to Universities

Enrolment in both the Universities is likely to be doubled during the 5th Plan period. A provision of Rs. 80.00 lakhs is proposed to be equally distributed between the two Universities during the Plan period.

Opening of Evening Shifts in Colleges

As already stated the enrolment in Colleges is likely to be doubled during the 5th Plan period. Even at present the pressure of enrolment in Colleges in the cities of Srinagar and Jammu is so great that enrolment in some of them has crossed the figure of 3,000. The need for opening of new Colleges is urgently felt but as limited resources do not permit this, it is proposed to start evening shifts so as to take optimum use of existing facilities and also to provide an opportunity to the students who cannot attend regular "day colleges".

In evening shifts, mostly art Subjects evening shifts in two Colleges, one at Srinagar and the other at Jammu in the 1st year of the Plan and two more Colleges will be covered in the 3rd year. Progressively this system would also be introduced in other Colleges where the total strength of a College becomes un-manageable.

In evening shifts, mostly art Subjects would be taught. No additional post of principal would be created, but the present Principal will be assisted by two Vice-Principals, one morning shift and the other for the evening shift.

Introduction of Correspondence Courses

It is also proposed to introduce the system of correspondence courses for higher education so as to reduce the pressure on regular colleges and also to provide opportunities for higher education to the employed person. It would require the establishment of Directorates of Correspondence Courses by both the Universities with the help of U. G. C. sum of Rs. 2.00 lakhs (Rs. 1.00 lakhs for each University) has been proposed on account of

grants to Universities for this very specific purpose as a matching share to U.G.C. assistance.

Opening of College at Leh

Ladakh is the only area in this State where the facilities for higher education are not available. There is immediate requirement to start a College of General Education in this backward and hilly area. Some advance action has already been taken up in this regard. It is proposed to start a College at Leh in the Vth Plan.

Introduction of Honours Courses

The Sahay Committee has recommended that after the P. U. C. and T. D. C. (I) are transferred to Schools, there should be two types of Courses in Colleges, a pass course of two years and a Honours Course of three years. Post-graduate Courses should be open for only those students who pass the Honours Courses. Some provision would be made for good pass course students to appear for the Honours Course and thus, qualify themselves for post-graduate studies.

A complete programme of introducing Honours Courses progressively in most of the subjects in the Colleges during the Fifth Plan has been worked out on the following basis. In the first phase honours courses would be started in only those subjects for which post-graduate teaching facilities exist at present in the two Universities.

In the second phase Honours would be extended to those subjects for which post-graduate facilities are planned to be introduced by the Universities.

For introduction of Honours in Science subjects on an average four Lecturers are

required while for arts, minimum two additional Lecturers would be required.

Provision of Additional Teaching Staff

For introduction of Honours Courses, evening shifts and for additional enrolment 900 teachers would be required during the Fifth Plan period at graduate stage.

The total expenditure on the provision of this additional staff would be Rs. 152.50 lakhs during Fifth Plan.

Construction Programmes

It has also become necessary to expand existing accommodation in respect of Laboratories and class rooms in the Colleges wherever possible and to provide capital grants for this purpose as also for completion of work-in-progress. This is estimated to entail an outlay of

	<i>Fifth Plan</i>
Works-in-progress	Rs. 15.00 lakhs
New Works	Rs. 15.00 lakhs
	<hr/>
Total	Rs. 30.00 lakhs
	<hr/>

Programmes of Qualitative Improvement

Improvement of existing Colleges

The State has got 18 Government Colleges in all for general education. Out of these five colleges have enrolment of over 2,000 each. It is proposed to give a grant of Rs. 1.00 lakh to each of these five big colleges and Rs. 0.50 lakhs each to the rest of the smaller ones for improvement of Laboratories and Libraries. This is estimated to entail an outlay of Rs. 12.00 lakhs in Fifth Plan.

Improvement of students services

Following different schemes are proposed to be introduced under this programme :—

	(Rs. in lakhs)
	5th Plan
(a) Student Hostels (for ten colleges) ...	40.00
(b) Ten non-resident student centres (to be constructed with U.G.C. Assistance) ...	7.50
(c) Rest rooms and Toilets (for all Colleges) ...	7.50
(d) Transport facilities (buses for Colleges) ...	4.00
(e) Cycle shed for 15 colleges...	2.00
Total ...	61.00

Scholarships

It is also proposed that in addition to merit Scholarships, special incentives to under privileged groups of society including scheduled castes, first generation learners, backward and border area students may be provided in the form of Scholarships. An amount of Rs. 12.50 lakhs has been proposed for it in the Fifth Plan.

Faculty development programmes

Under these programmes following schemes may be covered:

	(5th Plan)
	(Rs. in lakhs)
(a) Construction of Teachers Hostels (for Mufasil Colleges, each hostel with 10 flats.)	13.00
(b) Orientation and Refresher Courses for College Teachers.	2.00
Total	15.00

(e) Teacher Education

The quality of teacher training leaves much to be desired. The Physical and faculty deficiencies have prevented training institutions from experimenting with innovative ideas and practices. Most of the activity of the training institutions is stereotyped. There is need to radically change the role and functions of training institutions. Because of the urgent need for trained teachers to meet the demand of expansion, it is difficult to undertake a whole scale re-organisation of teacher education programme all at-once. On the recommendations of Sahay Committee, advance action has already started in this respect. A separate Directorate of Teacher Education has been established to take care of the teachers training programmes. Besides training of teachers, inservice education, and teacher welfare programme, reorientation course, etc. will be taken up.

Physical Education & Youth Welfare

It is only recently that the State has special attention to the organisation of physical education and youth welfare activities. A separate Directorate under the charge of a full time Director with adequate staff at centre and in the field has been established to direct and control the activities relating to physical education and youth welfare.

Organisation of Educational tours and Youth Camps :—

It is proposed to send contingents of youth in groups to different parts of the country on tour to provide facility to the Youth of the State, particularly from the poorer section, to avail of winter sports and to organise inter School and inter district tournaments within the State.

Scouting and Girls Guiding as an International Youth Movement will be further strengthened and about 3,000 boys and girls will be attending different kinds of Scout/Guide craft camps, rallies and special skill short courses. About 100 teachers are expected to be trained in Scouting and Girl Guiding during 5th Plan.

Funds may have to be earmarked for financing the activities of various non-students Youth Sports Clubs, Cultural Associations and Voluntary Organisations engaged in Youth Welfare Activities.

Establishment of College of Physical Education at Manasbal, Kashmir

It is proposed to establish a College of Physical Education in the State during the 5th Plan with in-take company of 60 students for post-matric certificate and 40 for post graduate diploma courses. The outlay proposed for this scheme is Rs. 20.00 lakhs.

Development of State Sports Complex

At present there is no such open or indoor stadium with international specifications where state, national and international sport functions could be held. It is proposed to develop a State sports Complex.

Libraries and Social Education

A widespread and effective Library system is an assential support for informal education. The public libraries have been provided only for headquarters of District. While the education in the State is free no provision has so far been made for opening of Libraries at Tehsil levels. Even much remains to be done so far pre-

parations of publications and reference media/selections from records is concerned. It is proposed to open 20 Libraries in selected Tehsils at the rate of four Libraries per year. Each Tehsil Library would be provided with basic minimum staff and grants in the beginning.

5th Plan.....Rs. 5.67 lakhs.

Mobile Libraries at Jammu and Srinagar for providing reading facilities to the Public are proposed to be set up.

It is proposed to attach a Book Bank to every District Library in the State (two per year). Books will be issued from these Book Banks to the needy students upto Matric level on loan with the condition that if the students do not return the books annually no further books for the next class will be issued to them. For this scheme it is proposed to provide one Library Assistant to every District Library.

Scheme of Social Education

Some time back this Scheme was tried in the State but due to certain practical difficulties it was abandoned. During 5th Plan, it is again proposed to experiment with this scheme on the basis of Sahay Committee Recommendations. A token provision of Rs. 5.00 lakhs has been proposed for it in 5th Five Year Plan .

(f) Cultural Programmes

The thrust in the Fifth Plan in the field of Culture programmes is not to confine them to the cities and the elite, but stretch them out to all the corners of the State. It will mean a dual operation, the interpretation of the fine arts in terms intelligible to the people and modifying impact of the impulses emanating from the

people upon the cultural currents.

In this State, these programmes are looked after by following four agencies:—

- (a) Department of Archives
- (b) Department of Archaeology and Museums
- (c) Gazetteers Unit and
- (d) Academy of Art, Culture and Languages.

A. *Development of Archives*

The existing situation in the State in respect of Archives is far from happy. This discouraging picture is due to lack of sense of gravity of the problem and the failure to realise the proper importance of preservation of records of the State. During the Fifth Plan it is proposed to give special attention for the development of Archives in the State by adoption of following three schemes:

	(Rs. in lakhs)
	5th Plan
(i) Survey and acquisition of antiquities	2.00
(ii) Purchase of equipment	1.50
(iii) Preparation of records and extension of present building	2.50

Total	6.00

B. *Development of Archaeology and Museums*

The development of the two fields of Archaeology and Museums is directly and

closely related with the cultural rejuvenation of a country. While Archaeology brings forth hidden and unknown entities museums provide the place for their display and study by antiquarians and scholars. Simultaneous development in these two fields is, therefore, vital for real progress of culture.

The Jammu and Kashmir Academy of Art, Culture and Languages came into existence in July, 1958.

The main objective of the Academy is to foster and co-ordinate activities in the sphere of letters and languages, visual and plastic arts, music, dance and drama and the culture generally in the State of Jammu and Kashmir.

The Academy underwent a significant change in its organisational set-up and there has been a noteworthy expansion in its field of activities. During the 4th Five Year Plan some new schemes were introduced and projects successfully implemented. These schemes included opening of two full-fledged provincial offices, regional office at Leh and two Institutes of Music and Fine Arts one each at Jammu and Srinagar.

During the Fifth Five Year Plan period, emphasis would be laid upon the consolidation of the achievements already made as well as starting of some new schemes such as development of calligraphy art, promotion and preservation of rare forms of traditional performing arts, setting up of literary forums, copying of frescoes, writers workshops, sculptors camps etc.

**Comparative Statement Of Financial
Outlays : General Education Of Fourth
And Fifth Five Year Plan**

S. No. Sector	Fourth Five Year Plan	Fifth Five Year Plan
	Outlay	Outlay pro- posed
A. GENERAL EDU- CATION		
I Elementary Education	197.35 (28.03)	722.00 (35.36)
II Secondary Education	190.56 (27.06)	700.00 (34.38)
III University Education	223.26 (31.71)	400.00 (19.65)
IV Teacher Education	7.70 (1.09)	22.00 (1.08)
V Physical Education & Youth Welfare	12.40 (1.76)	90.00 (4.42)
VI Social Education & Libraries	9.00 (1.28)	20.00 (6.98)
VII Cultural Programmes	20.00 (2.84)	50.00 (2.46)
VIII Other Schemes	43.77 (6.23)	34.00 (1.67)
TOTAL (GENERAL EDU- CATION)	704.00 (100)	2038.00 (100)

**General Education
Schemewise Outlay Fifth Plan (1974-79)**

S. No.	Head/Sub-head/ Schemes	5th Plan outlay	approved
			Total Capital Foreign Exchange

1	2	3	4	5
---	---	---	---	---

**ELEMENTARY
EDUCATION**

I. Programmes of Expansion

i. Opening of Primary Schools (200 single teacher schools per year; total 1000)	105.00	...	...
Recurring	99.00	..	..
Non recurring	6.00	..	..

1	2	3	4	5
ii. Upgrading of Primary schools to Middle Standard (addition of 6th, 7th & 8th Class to 50 schools respec- tively every year; total 250 schools in each		118.95	..	..
Recurring		112.00	..	..
Non-recurring		6.75	..	..
ii. Provision of addi- tional teachers (4000 at Primary and 700 at Middle stage total 4700; also includes teachers appointed under Half-a-Million jobs programme)		308.65	..	..
Recurring		301.95	..	..
Non-recurring		6.70	..	..
iv. Part time Education (40 Centres per year for Continuation Cour- ses: total 200-25 Cen- tres per year for part time courses total 125)		25.00	...	...
Recurring		24.57	...	...
Non-recurring		0.25	...	...
v. Supervision & Admi- nistration (16 addi- tional TEO's No addi- tional TEO in the 1st year; only exis- ting offices of TEO's will adequately be strengthened in 1st year)		12.40	...	...
Recurring		10.00	...	...
Non-recurring		2.40	...	...
vi. Construction progra- mmes (30 lakhs for new construction) 10.00 lakhs for works in- progress 10.00 lakhs for local initiative)		50.00	50.00	...
Total cost of Expan- sion Programmes		620.00	50.00	...
Recurring		547.90	...	...
Non recurring		72.10	50.00	...
II. Programmes of Quali- tative Improvement				
a. Teachers Education Programmes				
vii. Opening of Distt. Institutes of Educa- tion (2 in 1974-75 &				

2					1				
3					2				
4					3				
5					4				
5					5				
2 in 1976-77 ; total 4)					Areas and Scheduled				
Recurring					Castes.				
Non recurring					7.70				
26.00					...				
9.60					...				
16.40					2.70				
16.00					...				
...					...				
...					2.55				
20.00					0.15				
20.00					...				
...					...				
5.00					5.00				
5.00					...				
...					...				
2.00					2.50				
1.00					1.00				
1.00					1.50				
...					...				
...					...				
5.00					10.00				
...					...				
...					...				
5.00					5.00				
...					...				
...					...				
0.50					1.00				
...					...				
...					...				
8.80					102.50				
3.00					44.00				
...					...				
2.50					16.65				
...					85.85				
6.30					722.00				
3.00					94.00				
...					...				
...					564.55				
...					157.95				
5.00					94.00				
...					...				
...					...				
4.00					92.00				
...					...				
...					...				

1	2	3	4	5	1	2	3	4
	Recurring	90.50	...	...	b. In-service training of Science Trs. (50-teachers per year total 250 teachers)		1.00	
	Non-recurring	1.50	...	...	c. Improvement of Laboratories with UNICEF aid (50 schools per year total 250 schools)		5.00	..
ii.	Provision of additional teachers (60 for introduction of Science 500, for vocational subjects, 50 as Career masters, 590 for adaptation of new pattern of Secondary Education in the grade of 340-700 and for additional enrolment; total 1200).	143.70	...	...	d. Provision of Lab. assistants (50 in 1st year and 25 in subsequent years; total 150 in the grade of 200 320) (Recurring)		12.55	..
	Recurring	1.70	...	...	vii. IMPROVEMENT OF SECONDARY SCHOOLS [RECURRING]		34.00	..
	Non-recurring	2.60	...	...	a. Provision of Library Asstts. (50 in 1st year and 25 in every year 1975-79; total 150 in the grade of 280-520)		18.00	..
iii.	Supervision and administration (4 posts of Dy. District Education Officers; in the 1st year existing officers will be adequately equipped).	1.80	...	...	b. Provision of Accounts Clerk (50 in 1st year and 25 every year from 1975-79 total 150 in grade 220-430)		14.00	..
	Recurring	0.80	...	...	c. Appointment of Subject Specialists (2 every year; total 10 in the grade 520 900)		2.00	..
	Non-recurring	40.00	40.00	...	viii. Scholarships (merit, merit-cum-poverty and types of scholarships to Secondary-class students)		30.00	..
iv.	Construction Programmes (15 00 lakhs for works in progress; 15.00 lakhs for new works and Rs. 10,00 lakhs for works through local initiative; total 4.00 lakhs).	280.00	40.00	...	Total (B)		90.00	..
	Costs of Expansion Programmes (A),				Recurring		51.60	..
	Recurring	236.00	...	...	Non-recurring		38.40	..
	non-recurring	44.00	40.00	...	C. Vocationalisation of Secondary Education (10 High Schools to be converted every year total 50 Schools)		20.00	7.00
B.	PROGRAMMES OF QUALITATIVE IMPROVEMENT.				D. Adoption of 10+2 pattern of secondary Education (42 Higher Secondary Schools and 8 High Schools to be converted to the new pattern)		310.00	200.00
v)	Teachers Training and Teachers Welfare Programme.	(Separately included in the Teacher's Education Sector)			Recurring		7.50	
vi)	DEVELOPMENT OF SCIENCE EDUCATION.	26.00	...	...	Non-recurring		12.50	7.00
	a) Introduction of Science in High School (15 every year; 1975-79 total 60 Schools)	7.45	...	...		
	Recurring	5.05	...	...		
	Non recurring	2.40	...	...		

1	2	3	4	5	1	2	3	4	5
	Recurring	00.00							
	Non-recurring	210.00	200.00						
	Total Secondary Educa-	700.00	247.00	..					
	tion								
	Recurring	395.10		..					
	Non-recurring	304.90	247.00	..					
	UNIVERSITY EDUCA-								
	TION								
	A PROGRAMMES OF								
	EXPANSION								
i a.	Grants to Universities(Rs. 40.00 lakhs to each University)	80.00		..	vii.	Construction Programmes	30.00	30.00	
						Works-in-progress	14.00	14.00	
						New Constructions	16.0	16.00	..
						Total Expansion programmes	298.50	40.40	
						Recurring	154.60		
						Non recurring	143.90	40.40	
					viii	Programmes Of Qualitative Improvement			..
						Improvement of existing colleges (grants for improvement of Libraries & Lab in all Government Colleges.	12.00		..
b.	Special grants to Jammu University for shifting of Camps (from 1975-76 onwards)	10.00	10.00	..	ix	Improvement of student services			
						Recurring (transport facilities)	62.00	61.00	..
						Non-recurring :	1.00	...	..
ii.	Opening of Evening shifts in colleges (2 in 1974-75 and 2 in 1976-77)	6.00		..	a.	Student Hostels for 10 Colleges	40.00	40.00	..
	Recurring	4.00			b.	Non-resident student Centres (10 with UGC assistance	7.50	7.50	..
	Non-recurring	2.00			c	Rest rooms (Toilets for all colleges)	7.50	7.50	..
iii.	Introduction of Correspondence Courses (Directorates to be established by both the Universities adhoc grant with the help of UGC)	2.00		..	d.	Cycle Sheds (for 15 Colleges)	2.00	2.00	..
					e.	Transport facilities (buses for colleges)	4.00	4.00	..
iv.	Introduction of Honours Courses & Professional Courses to be introduced in the Colleges in various subjects progressively.	17.00		..	x.	Scholarship to students merit; merit-cum-poverty scheduled castes, backward area, and boarder area scholarships.	12.50		..
	Recurring	2.00		..	B.	DEVELOPMENT PROGRAMMES	15.00	13.00	..
	Non-recurring	15.00		..					
v.	Provision of additional teaching staff (staff for additional enrolment, Honours Courses & Professional courses for graduate level only; 130 in 1st year; total 900)	152.50		..	i/	Construction of teachers hostels (for mufsil colleges, hostel with 10 flats)	13.00	13.00	..
	Recurring	148.00		..	ii/	Orientation Refresher Courses for College trainings.	2.00	—	..
	Non-recurring	4.50		..		TOTAL IMPROVEMENT PROGRAMMES	101.50	74.00	..
vi.	Strengthening of Supervision & Administration	1.00	0-40	..					
	Recurring	0.60		..		Recurring	1.00	—	..
	Non-recurring	0.40	0.40	..		Non-recurring	1.0.50	74.00	..

1	2	3	4	5	1	2	3	4	5
TOTAL UNIVERSITY EDUCATION									
		400.00	114.40	..					
Recurring		155.60	..	..			
Non-recurring		244.40	114.40	..					
TEACHER EDUCATION									
a) Teacher Education Prog. under Elementary Edu.					b) Sports Scholarship				
	(These have been included under Elementary Education sector.)				c) Purchase of land for play grounds and development of fields	10 00	...	...
b) Teacher Education programme under secondary Education					d) Youth Rallies				
i) Double shifts in TT Colleges; only provision of additional staff 10 every year; total 50		11.00	..	..	4 Appointment of Physical Education Irs (Recurring)	10.00	...	...
Recurring		10.50	..	..	5 a) Scouting and Girl Guiding	10.00	...	...
Non-recurring		0.50	..	..	b) Conduct of Youth Camps Youth Festivals				
ii) Construction Prog. of T. T. College Jammu (extension of college building)		3.00	3.00	..	6 Financial assistance to Camps & Youth Organisations.	2.00	...	...
iii) Development of extension service Deptt.		0.40	...	..	7 Payment of T. A. and D. A for movement of officials/teachers in connection with various programmes in and outside State	1.00	...	-	
iv) Organisation of Re-orientation courses for Secondary School teachers		1.50	..	..	8 Establishment of Nehru Yuwak Kendras with Central assistance.	1 50	...	..
v) State Board of Teachers Education		0.10	..	..	9 Organisation of NSS with Central assistance	1.00	-	..	
vi) Women Teacher quarters 45 qur. @ Rs 10000/-	4 50	4.50	..		10 Establishment of College of Physical Edu at Manasbal	20 00	11 00	...	
vii) State Awards to Secondary School Teachers	0 50	..	..		Recurring	6.00	...	...
iii) Other teacher welfare activities	1.00	..	..		Non-recurring	14 00	11.00	..	
Total (Teacher Education)		22 00	7.50	..	11 Improvement & Construction of Youth Hostels	3.00	2.50	..	
Recurring		10.50	..	..	Recurring	0.50	...	...
Non-recurring		11.50	7.50	...	Non recurring	2 50	2 50	...	
PHYSICAL EDUCATION & YOUTH WELFARE					12 Layout of Turf Wicket	2.00	2.00	...	
1 Organisation of Educational tours		8.00	...	...	13 a) Const. of Cricket Pavillion at Amar-singh Club Srinagar (works in progress)	5.00	5.00	..	
2 Winter sports and skiing at Gulmarg		2.00	...	1.00	b) Const. of Multipurpose Hall at Sports Stadium Srinagar (works in progress)	4.00	4.00	3.00	
3 a) Organisation of sports and games					14. Development of trekk-ing, mountaineering and allied sports, purchase of equipment		1.50	..	

1	2	3	4	5	1	2	3	4	5
5. Development of State Sports Complex					A—CULTURAL PROGRAMMES DEVELOPMENT OF ARCHIVES				
a/ One open stadium with capacity of 50,000 in Srinagar.	5.00	5.00	..	..	i) Survey and acquisition of Antiquities	2.00	..	..	..
b/ Two indoor Stadium with capacity of 5,000 one in Srinagar and other in Jammu.	4.00	4.00	..	..	ii) Preparation of equipment	1.50	..	..	..
c/ Two swimming pools one in Srinagar and other in Jammu	4.00	4.00	..	..	iii) Preparation of records and extension of present building	2.50	..	..	..
TOTAL PHYSICAL EDUCATION AND YOUTH WELFARE	90.00	33.50	1.00	..	Total (A)	6.00	..	..	..
Recurring	16.50	..	..	..	B—DEVELOPMENT OF MUSEUM AND ARCHAEOLOGY				
Non-recurring	73.50	33.50	1.00	..	i) Establishment of Museum at Leh	2.85	1.00	..	..
SOCIAL EDUCATION & LIBRARIES	..	..	..	..	ii) Establishment of Museum at Udhampur	2.00	..	..	..
(a)— Social Education Programmes	5.00	..	..	..	iii) Preservation of repairs of monuments	1.50	1.50	..	..
(b) 1 Research and Publication Programmes including History Unit	2.05	..	..	..	iv) Training of personnel in Archology & Museum	0.50	..	..	..
Recurring	2.00	..	..	..	v) Improvement of Museum at Srinagar	1.00	..	..	..
Non-recurring	0.05	..	..	..	Total (B)	7.85	2.50	..	..
2. Opening of Libraries at Tehsil level (4 Libraries every year; total 20)	5.67	..	..	..	Recurring	2.35	..	..	..
Recurring	4.67	..	..	..	Non-recurring	5.50	2.50	..	..
Non-recurring	1.00	..	..	..	Gazetters Unit	0.50	..	..	..
3. Establishment of Provincial Mobile Libraries (one in Jammu and one in Srinagar)	2.50	1.30	..	..	C—GRANTS TO CULTURE ACADEMY				
Recurring	1.20	..	..	..	Continuing Scheme				
Non-recurring	1.30	1.30	..	..	1. Dev. of literary Activities	1.35	..	..	..
4. Opening of Distt. Book Banks (Recurring) (per year; total 10 one in each Distt.)	1.04	..	..	..	2. Dev. of Cultural Activities	4.90	..	..	..
5. Strengthening of Directorate including office at Leh (Recurring)	3.74	..	..	..	3. Dev. of Theater Movement	0.35	..	..	..
TOTAL (SOCIAL EDUCATION & LIBRARIES)	20.00	1.30	..	..	4. Expansion of Dictionary Projects	2.97	..	..	..
Recurring	12.55	..	..	..		
Non-recurring	7.35	1.30	..	..			

1	2	3	4	5	1	2	3	4	5
5.	Expansion of two Institutes of Music and Fine Arts and Sofiyana Mausaqi	6.84	..	..	Recurring			25.38	—
					Non recurring			10.27	8.97
6.	Expansion of Academy offices	4.40	...	.	Total (Cultural Programmes A to C)			50.00	8.10
7.	Construction of Integrated Buildings and Auditorium at Jammu.	8.17	8.17	..	Recurring			20.50	—
8.	Commission to Architect	1.00	..	..	Non-recurring			29.50	8.10
9.	Robes of Honours and fellowships.	0.65	..	—	OTHER SCHEMES				
Total:					1.	Holding of Educational Conferences		1.00	—
NEW SCHEMES					2.	Development of Languages		1.00	—
1.	Dev. of Calligraphy Art.	1.30	—	—	3.	Printing of National Registers		0.50	—
2.	Construction of additional space for Academy office at Srinagar.	0.80	0.80	—	4.	Loans to Post-graduate Students		15.00	15.00
3.	Folk Festivals	0.35	—	—	5.	School Broadcasting Scheme		10.00	—
4.	Literary Forum	0.72	—	—	6.	Educational Survey and Statistics		2.00	—
5.	Copying of Frescoes	1.00	—	—	7.	Development of Text-books.		0.50	—
6.	Travelling Grants to Young Writers	0.30	—	—	8.	Development of N.C.C.		4.00	—
7.	Writers Workshop	0.25	—	—	Total other schemes				
8.	Sculptures Camp	0.30	—	—				34.00	15.00
Total:					Grand total General Education				
Total (C)								2038.00	521.90
		35.65	8.97	—					1.00

STAGE WISE ENROLEMENT IN GENERAL EDUCATION SCHOOL STANDARD

Year	Primary State (I- V Classes)			Middle Stage (VI-VIII Classes)			Secondary stage (IX- XI Classes)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1950-51	0.66 (31)	0.12 (6)	0.78 (19)	0.18 (16)	0.02 (2)	0.20 (9)	0.053 (5)	0.003 (1)	0.056 (3)
1955-56	1.02 (46)	0.24 (12)	1.26 (30)	0.28 (23)	0.05 (5)	0.33 (14)	0.11 (10)	0.02 (2)	0.1 (6)
1960-61	1.65 (71)	0.45 (21)	2.9 (47)	0.48 (38)	0.12 (10)	0.60 (25)	0.17 (14)	0.05 (5)	0.22 (10)
1965-66	2.22 (84)	0.75 (30)	2.97 (58)	0.63 (44)	0.24 (18)	0.87 (32)	0.33 (25)	0.08 (7)	0.41 (6)
1968-69	2.56 (90)	1.05 (39)	3.61 (65)	0.75 (48)	0.30 (21)	1.05 (35)	0.41 (28)	0.10 (8)	0.51 (19)
1973-74 Anticipated	3.04	1.57 (51)	4.61 (73)	0.89 (50)	0.42 (26)	1.31 (38)	0.60 (36)	0.18 (12)	0.78 (25)

FIFTH PLAN TARGETS

1974-75	3.14 (95)	1.77 (57)	4.91 (76)	0.92 (50)	0.46 (28)	1.38 (39)	0.65 (38)	0.20 (13)	0.85 (26)
1975-76	3.26 (97)	2.01 (63)	5.27 (81)	0.96 (51)	0.52 (31)	1.48 (41)	0.71 (41)	0.22 (14)	0.93 (28)
1976-77	3.40 (100)	2.30 (71)	5.70 (86)	1.01 (52)	0.60 (34)	1.61 (44)	0.78 (43)	0.24 (15)	1.02 (30)
1977-78	3.56	2.65	6.21	1.07	0.69	1.76	0.86	0.26	1.12
1978-79	3.74 (107)	3.05 (92)	6.79 (100)	1.14 (56)	0.79 (43)	1.93 (50)	0.95 (50)	0.28 (16)	1.23 (34)

STATGE - WISE ENROLMENT IN HIGHER EDUCATION (J & K STATE)

Year	PUC/Inter		Graduate			Post Graduate			Grand Total			
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1950-51	1 813	171	1,984	605	81	680	7	..	7	2,425	252	2,677
1955-56	3,208	485	3,693	1,048	192	1,240	60	12	72	4,316	689	5,005
1960-61	5,026	1,258	6,284	1,281	425	1,706	116	58	174	6,423	1,741	8,164
1965-66	2,927	1,397	4,324	4,087	2,100	6,187	413	270	683	7,427	3,773	11,200
1966-67	3,232	1,609	4,841	4,893	2,140	7,033	577	312	889	8,702	4,061	12,763
1967-68	3,369	1,584	4,953	5,763	2,563	8,326	628	396	1,024	9,730	4,543	14,273
1968-69	4,295	1,958	6,253	6,936	2,971	9,907	703	490	1,193	1,934	5,419	1,733
1969-70	4,663	2,256	6,919	8,721	3,438	12,159	707	443	1,150	14,091	6,137	20,228
1970-71	4,987	2,226	7,213	10,807	3,849	14,656	776	474	1,250	16,570	6,549	23,119
1971-72	5,622	2,573	8,195	1,2227	4,330	16,557	821	490	1,311	18,670	7,393	26,063
1972-73 (Est)	6,354	2,852	9,206	15,054	4,966	20,020	960	593	1,553	22,368	8,411	30,779
1973-74	7,084	3,156	10,240	18,115	5,655	23,770	1,062	654	1,716	26,261	9,465	36,726
5th Plan Targets												
1974-75	7,957	3,493	11,450	20,228	5,982	26,210	1,171	721	1,892	29,356	10,196	39,552
1975-76	8,894	3,866	12,760	23,043	6,457	29,500	1,293	795	2,088	33,230	11,118	44,348
1976-77	9,952	1,278	14,230	26,672	7,088	33,760	1,427	877	2,304	38,051	12,243	50,294
1977-78	11,136	4,734	15,870	31,354	7,896	39,250	1,575	967	2,542	44,065	13,597	57,662
1978-79	12,460	5,240	17,700	37,147	8,893	46,040	1,739	1,066	2,805	51,346	15,199	66,545

5th Five Year Plan General Education

Employment Potential

No.	Sector	5th Five Year Plan		
		Teachers	Others	Total
	Elementary Education	7,101	99	7,200
	Secondary Education	2,224	530	2,754
	University Education	900	350	1,250
	Teachers Education	50	25	75
	Physical Education and Youth Welfare.	130	20	150
	Social Education & Libraries	1	73	74
	Cultural Programmes	..	19	19
	Other Programmes	..	2	2
	Total General Education	10,406	1,118	11,524

Fifth Five Year Plan

Selected Physical Targets

Head/Sub head/Item	Unit	Base Level 1973-74	5th Plan Target Level 1978-79
1	2	3	4
ENROLMENT	No in		
i Primary Stage (I-V Classes)	lakhs		
Boys	do.	3.04	3.74
Girls	do.	1.57	3.05
Total	do.	4.61	6.79
ii Middle stage (Vi-VIII Classes)			
Regular Classes			
Boys	do	0.89	1.14
Girls	do.	0.42	0.79
Total	do.	1.31	1.93
Part-time classes			
Boys	do.	..	0.05
Girls	do.	..	0.05
Total	do.	..	0.10

	1	2	3	4
Continuation Classes				
	Boys	do	..	0 05
	Girls	do.	..	0 05
	Total	do.	.	0.10
iii	Secondary Stage (IX XI Classes)			
	Boys	do.	0.60	0 95
	Girls	do.	0.18	0 28
	Total	do.	0.78	1.23
B	ENROLMENT RATIOS (Primary Stage)			
	Boys	%	93	107
	Girls	do.	51	92
	Total	do.	73	100
	Middle Stage			
	Boys	do.	50	56
	Girls	do	26	43
	Total	do	38	50
	Secondary Stage			
	Boys	do.	36	50
	Girls	do.	12	16
	Total	do.	25	34
C	COLLEGE/UNI VERSITY ENROL- MENT(INCLUD- ING P. U. C.)			
	Boys	No. in lakhs	0 26	0.51
	Girls	do.	0 10	0.15
	Total	do.	0.36	0.66
D	NUMBER OF INSTITUTIONS			
	Primary Schools	Number	6063	6813
	Middle Schools	do.	1476	1626
	High/Higher Second- ary Schools	do.	597	672
E	PERCENTAGE OF TRAINED TEACHERS			
	Primary Schools	%	67	100
	Middle Schools	%	82	100
	Secondary Schools	%	93	100

FIFTH PLAN DISTRICT LEVEL

Physical Targets

District.	Opening of Primary Schools.	Upgrading of Schools from.		Opening of Centres for Introduction of Parttime Education.	Provision of Additional Teachers.	
	5th Plan	Primary to Middle Std.	Middle to High Std.	5th Plan	Elementary Education	Secondary Education
		5th Plan	5th Plan		5th Plan	5th Plan
1. Srinagar	160	38	10	41	752	204
2. Baramulla	100	42	15	41	846	228
3. Anantnag	160	45	15	41	846	216
4. Jammu	200	38	15	41	705	216
5. Udhampur	100	22	5	41	876	72
6. Kathua	100	20	5	40	329	72
7. Rajouri Poonch	80	25	5	40	423	108
8. Doda	100	20	5	40	423	84
Total :—	1000	250	75	325	4700	1200

District	District Institute of Education	Introduction of work Experience Programmes	Opening of Secisonal Schools.
	5th Plan	5th Plan	5th Plan
1. Srinagar	1	7	5
2. Brramulla	1	6	5
3. Anantnag	1	6	5
4. Jammu	1	7	..
5. Udhampur	1	6	..
6. Kathua	1	6	..
7. Rajouri, Poanch	1	6	5
8. Doda.	1	6	5
Total	10	50	25

—Technical Education

Technical Education has the inherent responsibility of not only identifying the existing and emerging occupational areas in the various fields of human endeavour but also of providing a necessary vehicle for training the required manpower for harnessing these resources. The Fourth Five Year Plan for Technical Education primarily aimed at the consolidation of various schemes of Technical Education and at the same time witnessed the re-opening of the Government Polytechnic at Srinagar.

The Fifth Plan with an allocation of Rs. 125.00 lakhs for Technical Education while particularly aiming at increasing teaching effectiveness will also pave the way for diversification of conventional courses into broad specialities under major engineering disciplines to keep pace with the requirement of specialists to man new and emerging occupations in a fast changing world of technology. For instance short duration course may be started in Architecture, Town Planning, Public Health Engineering etc. The broad physical targets as laid for the Fifth Plan are as under :—

Base level
4th Plan 5th Plan

1. K. G. Polytechnic, Srinagar

i) Diploma	120	120
ii) Draftsmen	60	60
iii) Other courses (new)	—	20

2. Govt. Polytechnic, Jammu

i) Diploma	100	100
ii) Draftsman	55	55
iii) Other course (new)	—	—

Schemewise outlay for Fifth Plan 1974-79 Technical Education

S. No.	Head/Sub-head Scheme	(Rs. in lakhs)		
		5th Plan outlay	approved	Foreign Exchange
1	2	3	4	5
1. INTRODUCTION OF NEW COURSES				
a)	3 years Automobile Engg. Diploma course to be introduced in Polytech- nic Srinagar with intake capacity of 10 seats.	11.30	4.62	—
b)	Other courses	8.67	—	—
2. Construction of a Audi- torium for Jammu Poly- technic and Examination hall for Srinagar Poly technic				
		10.00	10.00	—
3. QUALITY IMPROVE- MENT PROGRAMME				
i.	Modernisation of Labs.	1.50	—	—
ii.	Improvement of exist- ing courses i.e. creation of staff.	2.00	—	—
iii.	Scholarships	2.00	—	—
iv.	other items like Educa- tion tours, games recrea- tion, library etc.	4.50	—	—
4. Educational Loans				
		85.00	85.00	—
Total (Technical Educa- tion)				
		125.00	99.62	—

Fifth Plan 1974-79

Technical Education

SELECTED PHYSICAL TARGETS

Head/Sub-head/Item	Unit	Base Level (1973-74)	5th Plan Target level (1974-79)
Govt Polytechnic, Srinagar.	1		
	Diploam	120	Diploma 120
	Draftsmen	60	Draftsmen 60
			Other courses (new) 20
Govt. Polytechnic, Jammu.	1		
	Diploma	100	Diploma 100
	Draftsmen	55	Draftsmen 55
			Other courses (new) 20

FIFTH PLAN 1974-79

TECHNICAL EDUCATION

Employment (Manpower requirements)

S.No.	Category	Fifth Plan targets
1.	Engineering	
	(a) Degree Holders	
	(i) Civil	10
	(ii) Electrical	1
	(iii) Mechanical	1.
	(iv) Chemical	—
	(v) Metallurgical	—
	(vi) Electronic	3
	(vii) Automobile	—
	(b) Diploma Holders	
	(i) Civil	8
	(ii) Electrical	—
	(iii) Mechanical	—
	(c) Clerical	1
	(iv) Automobile	1
	(d) Skilled	2
	(e) Class IV	6

2—Health

Health is an important sector for the development of human resources. The broad objective of health programme have so far been to control and eradicate communicable diseases and to provide curative and preventive health services especially in the rural areas through the primary health centres supported by sub-centres on the base linked with referral hospitals and by augmenting training programmes of medical and para medical personnel during the last 20 years. Since the Planning process started in the State considerable progress has been made under the various health programmes. Notable achievements have been made in regard to the eradication of Malaria and Small-pox and control of T.B. resulting in a marked decline in the incidence of these diseases. The number of hospital beds which was 600 in 1947 is expected to go up to 4864 by the end of the Fourth Plan.

There are at present 76 Primary Health Centres and 187 sub-centres in the State excluding the district of Ladakh. This indicates that 60,000 people are served by one Primary Health Centre. There are two to three Sub-Centres attached with each Primary Health Centre. Most of the Primary Health Centres besides staff and equipment are also provided with observation beds to enable people in the rural areas to have medical care facilities within easy reach. Facilities like X-Ray, Laboratory, Dental Clinics and Anti-rabic treatment have also been provided in most of the Primary Health Centres. Staff and supplies both for preventive and curative services have been provided for in all the centres. Out of the 76 Primary

Health Centres 61 Health Centres have the departmental buildings and the remaining 15 health centres are housed in un-suitable rental buildings.

In addition to the Primary Health Centres there are 13 T. B. Clinics, 4 Leprosy Control Units and 37 Leprosy Clinic Centres in areas having higher incidence of these diseases.

During the Fifth Plan it is proposed to expand medical facilities in the rural areas and to correct the imbalances at the regional, district and block levels by way of :—

- (a) increasing accessibility of health services facilities and medical facilities in the rural areas in general and especially in hilly and backward regions particularly by opening of additional dispensaries;
- (b) filling up the gaps in the existing facilities by construction of buildings for Primary Health Centres, out patient and in patient departments for rural hospitals, quarters for medical officers and other staff.
- (c) establishment of Sub-Centres;
- (d) setting up of rural hospitals, improvement of hospitals by raising number of nurses, increasing of bed strength, provision of additional technical staff, new Department of paediatrics etc.

During the Fifth Plan it is proposed to

increase the grant for drugs to Rs. 12,000 per annum for each Primary Health Centre and Rs. 2,000 for each Sub-Centre. 12 more Rural Hospitals with 30 beds each are proposed to be set up. The proposed rural hospitals like other districts and sub-district hospitals will besides the usual number of doctors be provided with additional doctors having post-graduate qualifications in various disciplines like Surgery, Gynaecology, Ophthalmology and anaesthesia.

The district hospitals are proposed to be improved so that the patients admitted there get all possible facilities and benefits allowed to the patients in the hospitals in the city. All these hospitals will have arrangements for 100 indoor patients. The number of nurses to reach the norm of one nurse for five beds in each of the hospitals is expected to be reached during the 5th Plan against 1 nurse after 7 to 8 beds at present in the main hospitals. The intake capacity for trainee nurses have been increased from 50 to 100 per annum.

Besides, expanding the medical facilities at the district level it is proposed to expand these facilities at the rural level by opening 100 Allopathic Dispensaries 23 sub-centres and 200 Medical Aid Centres in the areas which are not as yet covered by any type of medical unit such as Health Centre, Sub-Centre, Allopathic Dispensary, Medical Aid Centre etc. The Government is committed to have a medical unit set up at Panchayat level so that the services of the Doctor/Hakim/Vaids are available for a population of at least 2,000 in a particular area. The Department has covered 786 Panchayats leaving 669 Panchayats yet to be covered. During the Fifth Plan attempt will be made to give coverage to such of the Panchayats as have a population of 3000 and above and are without medical aid within a distance of 4 to 5 Km. Out of this 20% are intended to be opened in the hilly and backward areas and the areas inhabited

by the Gujjars and Bakarwals.

Training Programme

Two training schools set up in 1957 are in existence and they provide training for Nurses, Compounders, Basic Health Workers and Technicians. These are proposed to be strengthened.

Indigeneous System of Medicines.

There were two Ayurvedic and Unani Colleges established in the beginning of the 3rd Plan. The Unani College has been closed but the hospital attached to it continues. The Ayurvedic College in Jammu has an annual admission capacity for 20 students. Additional staff is required for the Ayurvedic College and the Unani Hospital. The buildings occupied by the Ayurvedic College at present are not suitable for the college and its teaching hospital. It is, therefore, proposed to have suitable buildings for this purpose and a hospital with minimum bed strength of 50 as against 25 sanctioned at present.

Control of Communicable Diseases

The Public Health Programme like NMEP, N.T.C.P, T.B. Control, Leprosy etc. were Centrally sponsored schemes during the Fourth Plan. These may continue to be so during the Fifth Plan. An amount of Rs. 55.12 lakhs has been proposed in the Fifth Plan for these programmes.

Medical Education and Research

There are two medical colleges in the State. The Medical College for Jammu is under construction and the classes have been started this year in improved structures. An amount of Rs. 282 lakhs has been proposed for the Medical College, Jammu and Rs. 118 lakhs for Medical College, Srinagar. In the Medical College Srinagar it is proposed to open three new department of Nephrology, Neurology and Gastro-Enterology as diseases of Kidney, Nervous system and gastro-entriology are

very common in the Valley.

A brief account of the various schemes proposed under the Fifth Plan is as follows :

1. *Minimum Needs Programme*

It is proposed to raise the number of Sub-centres and Rural Hospitals from 187 and 4 at present to 210 and 16 respectively during the 5th Plan, besides adequate measures will be taken for making up deficiencies in buildings, staff quarters, drugs, trained personnel, etc. Rs. 300 lakhs have been allocated for the purpose during the 5th Plan.

2. *Hospitals and dispensaries.*

In order to raise the bed strength of all the district Hospitals to 100, it is proposed to provide 25 additional beds in Udhampur Hospital and 50 additional beds in Doda Hospital during the 5th Plan. The following improvement measures will be taken as far as possible within the funds available during the Fifth Plan:—

- (i) Provision of the services of Nurses at the rate of one Nurse for 5 beds.
- (ii) Establishment of paediatric treatment facilities.
- (iii) Improvement of water supply, sewage and Drainage system in Hospitals.
- (iv) Construction of out-patient departments in rural Hospitals.
- (v) Provision of additional funds to meet the demands of drugs, diet, etc. of these Hospitals.

100 more allopathic dispensaries and 200 additional medical aid centres are proposed to be established raising their number to 348 and 257 respectively by the end of 5th Plan. In this manner 1065 out of the 1425 panchayats in the State will be provided with medical units during this period.

Trainings

The two departmental training schools set up in the State for training of para-medical personnel like, Nurses, Compounders, Technicians (X-Ray, Laboratory, Dental) Sanitary Inspectors etc. will be continued during the 5th Plan at an estimated cost of Rs. 16.00 lakhs.

Medical Colleges

An expenditure of Rs. 175.00 lakhs is anticipated to be incurred on the Medical Colleges ending 4th Plan. For the 5th Plan an allocation of Rs. 282 lakhs has been made for the Jammu medical College. The annual intake capacity will be maintained at the present level i.e. 100 for MBBS.

In the Srinagar Medical College the main problem is lack of proper accommodation, particularly, in its attached Hospitals. The main aim of investment on this college during the 5th Plan will, therefore, be providing extra accommodation for out-patients Department and the Hostel for Internees and Registrars. Besides three new departments of Nephrology, Neurology and Gastro-entriology are proposed to be set up. An allocation of Rs. 118.00 lakhs for the 5th Plan has been proposed in the Plan.

Scheme outlay for fifth Plan 1974-79

S. Head/Sub-Head/Scheme No.	(Rs. in lakhs)	
	5th plan approved outlay	
	Total	Expenditure
A. HEALTH SERVICES		
I. MINIMUM NEEDS PROGRAMME :		
1. Primary Health Centres	73.20	58 00
2. Sub-Centres	59.70	40 00
3. Rural Hospitals	167.10	89 00
Total	300 00	187.00

II. HOSPITALS AND DISPENSARIES

1. ExP. CD Hospt. Sgr	—	—
2. Exp. CD Hospt. Jammu	—	—
3. Mental Hospt. Disease Hospitals	—	—
4. Distt. Hospt. Antg.	3.55	—
5. —do— Baramulla	7.87	3.00
6. JLNK Hospt. Srinagar	5.45	1.50
7. Gandhinagar Hospital, Jammu	4.45	—
8. Distt. Hospt. Udhampur	3.90	—
9. —do— Rajouri	5.20	1.50
10. —do— Doda	10.80	7.00
11. —do— Kathua	5.20	1.50
12. Exp. Muffassil Medical facilities	91.58	1.48
Total	138.00	15.98

III. TRAINING

1. Trg. of A. M. Person	16.00	—
2. Education Loans	30.00	30.00
Total	46.00	30.00

IV. INDEGENIOUS SYSTEM OF MEDICINES

1. Ayd. College Jammu	4.15	0.53
2. Unani Hospt. Sgr.	2.15	0.53
3. Unani/Ayd System of Medicines	18.70	—
Total	25.00	1.06

V. OTHER SCHEMES

1. Drug & Food Control	8.00	—
2. Lab. Services	11.80	—
3. Vital Statistics	11.00	—
4. Imp. of Plan	5.50	—

5. Health Education Bureau	4.70	—
6. School Health	4.00	—
7. Medical Stores	—	—
8. Small Pox	—	—
9. Leprosy	—	—
Total	45.00	—
Total Health Services	554.00	234.04

B. MEDICAL EDUCATION

1. Medical College Jammu and attached teaching hospital (i. e. SMGH Hospital)	282.00	220.00
2. Medical College Sinagar and the following attached hospitals		
i. S. M H. S. Hospital	}	118.00 80.00
ii. Women Hospital		
iii. Mental Hospital		
iv. Urban PHC Hazratbal		
v. Rural PHC Ganderbal		
3. Educational Loan	25.00	25.00
Total Medical Education :	425.00	325.00
Grand Total :— A & B	979.00	559.04

Health/Medical Education Fifth Plan 1974-79 Selected Physical Targets

S. No.	Head/Sub-Head/Item	Unit	Base	5th Plan Level Targets 1973-74	Level 1978-79
--------	--------------------	------	------	--------------------------------	---------------

I. MMIMUM NEEDS PROGRAMME

1. No. of Primary Health Centres.	Nos	76	76
2. No. of Sub-Centres	Nos	187	210
3. No of Rural Hospitals	Nos	4	16

HOSPITALS AND DISPENSARIES

District Hospitals	Nos	8	8
Hospitals & Dispys	Beds		
Urban	Nos	3843	3843
Rural	Nos	1021	1716
Allop. Dispensaries	Nos	248	348
Medical-aid-centres	Nos	57	257
Unani & Ayd. Dispensaries	Nos	361	361

TRAINING PROGRAMME :

Trng-Nurses

No. of Institutions	Nos	2	2
Annual Intake	Nos	100	100
Annual outturn	Nos	60-70%	60-70%

INDEGENIOUS SYSTEM OF MEDICINES :

Ayd. Colleges	Nos	1	1
Unani Hospitals	Nos	1	1
Ayd. Hospitals	Nos	1	1

OTHER SCHEMES HEALTH

Drug Laboratories	Nos	1	1
Food Laboratories	Nos	2	2
Regional Public Health Laboratroy	Nos	1	1

MEDICAL EDUCATION.

a) Number of Medical Colleges: -			
i) Medical College Sgr.	Nos	1	1
ii) Medical College Jammu	Nos	1	1
b) Annual Admissions			
i) Medical College, Jammu			
a) MBBS Admissions	Nos	100	100
ii) Medical College Sgr			
a) MBBS admissions	Nos	110	110
b) Post-graduate admission	Nos	10	24

Health/Medical Education Fifth Plan 1947-79

(Employment Manpower Requirements)

Health Services

Category	5th Plan target
Specialist	74
M. B. B. S.	123

3. Dental Surgeons	9
4. Vaidas and Hakims	20
5. Nurses	105
6. A. N. Ms.	225
7. Lab Dental, X. Ray Technicians	76
8. Luniar Medical Assistants	326
9. S. Inspectors	8
10. Lady Health Visitors	6
11. Drivers	9
12. Health inq Officer	1
13. Asstt Architect	1
14. Draftsman	1
15. Projectionists	5
16. Health Educators	6
17. Nut, Feild Asstt.	10
18. Medical Social Workers	1
19. Statistical Assistants	1
20. Junior Accountants	1
21. Superintendents	1
22. Head Clerks	11
23. Stenos	5
24. Senior Assistants	31
25. Junior Assistants	13
26. Librarian	1
27. Inf. Servants	403

Total :— 1473

B Medical Education

1. Teachers

i) Professors	9
ii) Associate Professors	14
iii) Assistant Professors	20
iv) Lecturers	15
v) Registrars	30
iv) Demonstrators	10

2. Accountants

i) Junior Accountants	1
ii) Accounts Clerk	2

3. Clerical

i) Superintendent	1
ii) Head Assistant	2
iii) Senior Assistants	2
iv) Junior Assistants	5
v) Librarians	2

4. Statistical

i) Statistical Assistants	2
ii) Junior Statistical Assistants	2

5. Technicians	8
6. Class IV	30

3. Urban Water Supply

Supply of potable drinking water is one of the basic human needs. There is plenty of water available in the two cities and the towns of Baramulla, Anantnag and Udhampur but it is not potable unless treated. The existing water supply system in the cities of Jammu and Srinagar are nearly half a century old. During these years not only has the population of the cities increased but even the configuration of the cities has undergone changes creating pockets of heavy concentration which have strained the distribution system to the limit. The standard of living has also gone up, and, all in all, the requirements of potable water have grown sharply.

An allocation of Rs. 5.00 crores has been made for the Urban Water Supply Schemes as indicated below:—

Kashmir Division

1. Srinagar City	... Rs. 137.76 lakhs
2. Baramulla Town	... Rs. 54.00 lakhs
3. Anantnag Town	... Rs. 53.00 lakhs
4. Common items works	... Rs. 30.00 lakhs
5. Establishment surveys etc.	... Rs. 25.24 lakhs
Total:-	<u>Rs. 300.00 lakhs</u>

Jammu Division

1. Jammu City	... Rs. 152.00 lakhs
2. Udhampur Town	... Rs. 26.00 lakhs
3. Establishment survey etc.	... Rs. 22.00 lakhs
Total:-	<u>Rs. 200.00 lakhs</u>

Srinagar City

The existing system of supplying treated water in Srinagar city dated back to about fifty years when Nishat Plant was first commissioned. Although later on two more plants, one at Alusteng and other at Doodganga, were added but these plants are insufficient to meet the requirement of the present population of Srinagar city. The existing plants especially Nishat and Alusteng need radical improvements. The conveyance channels from source to plant sites have to be improved. Work on this is in progress. A 27" dia pipe line from Ganderbal to Alusteng and 36" pipe from Harwan to Nishat is being laid. It is proposed to complete these works in a substantial manner during the next year.

The treatment plant at Nishat needs immediate improvements in respect of sedimentation and filtration facilities. It is necessary to construct zonal reservoirs and other allied works immediately to enable equitable distribution of water throughout the city. As funds required are Rs. 207.50 lakhs which is in excess of the 5th Plan provision the possibilities of obtaining institutional finance will be explored.

Anantnag Town

A scheme for augmentation of water supply to cater to the need of the population of 70,000 souls is already in hand. This will spill-over to 5th Plan. An allocation of Rs. 53.00 lakhs have been proposed for it.

Jammu Division

Urban water supply Jammu comprises Jammu city and Udhampur town, which have already been provided with piped water supply. The distribution system of the Jammu city has out lived its age and also is inadequate to cope with the increased demand of the present population which has increased manifold after 1947 and therefore needs remodelling. The increase in population has also necessitated increase in supply of additional quantity of potable water. Keeping in view the increase in demand in Jammu city, provision has been made for remodelling of the existing system, construction of zonal reservoirs and remodelling of filtration plant at Tawi. During the 5th Plan, schemes will be taken up for augmentation of 7.48 million gal-

lons of potable water to the present supply of 8.84 million gallons per day to Jammu city. Accordingly, an allocation of Rs. 152.00 lakhs have been made.

Udhampur Town

Udhampur town is at present being provided water at the rate of 8 to 10 gallons per head/per day which is quite insufficient to meet the requirements of the people of the town. The town has also expanded considerably both in area and population. Augmentation of water supply to this town is essential and needs immediate attention. As a short term measure it has been proposed to lift 1.2 MGD water from river Tawi and supply the same to the town after proper treatment.

Urban Water Supply Scheme-wise outlay for the Fifth plan 1974-79

(Rs. in lakhs)

Item Head/Sub-Head/Scheme	Total esti- mated cost	Anti cipated Exp. 4th plan	Total	5th plan approved outlay			
				Capital	F.	Ex.	
1	2		3	4	5	6	7
URBAN WATER SUPPLY JAMMU							
WATER SUPPLY JAMMU CITY							
SPILL-OVER SCHEMES							
a) sinking of T.W. and other allied works at Science College Jammu	Rs 10.25						
b) -do- Bagh Waziran	Rs 7.75						
c) -do- Talab Tiloo	Rs 6.52						
d) -do- Mohindernagar	Rs 12.00						
e) -do- Samadian	Rs 8.10						
f) -do- Digiayana	Rs 11.25						
g) -do- Dhounthly (2 T.Ws)	Rs 10.10		78.11	62.81	15.30	15.30	..
h) Remodelling and Renovation of filtration plant	Rs. 3.60						
i) Impvt. of W.S to Low paid Sector Gandhinagar & Interconnection of T.Ws and Manda Reservoir with Distribution system	Rs. 3.64						
j) Spill-over works from care taker period	Rs. 4.90						
	Rs. 78.11		78.11	62.81	15.30	15.30	..
JAMMU CITY NEW SCHEMES							
a) Impvt and augmentation of W S Jammu city			125.00	..	..	..	..
b) Purchase and Installation of Diesel Generating sets at various pumping Stations as stand by operate while break down of Electric power.			20.00	..	..	..	..
c) Sinking of 3 Tubewells with other allied works in scarcity zones of Jammu city			17.70	..	..	..	..
d) providing of Crude W S. for parks in Railway Complex, Gandhinagar etc.			56.00	..	..	..	..
			218.70	..	136.70	136.70	..
Total New Schemes.			296.81	62.81	152.00	152.00	..
Total Jammu city Spill-over and New							

1	2	3	4	5	6	7
<i>Udhampur Town.</i>						
Improvement and augmentation of water supply						
Ud-hampur Town	26.00	..	26.00	26.00	..	
Total:	26.00	..	26.00	26.00	...	
<i>Common items for Urban Water Supply:</i>						
1. Establishment Charges	20.00	--	20.00	20.00	..	
2. Surveys	1.00	--	1.00	1.00	..	
3. Tools and Plants	1.00	...	1.00	1.00	..	
Total:	22.00	..	22.00	22.00	..	
Total A(i.e Jammu Urban Water Supply	344.81	62.81	200.00	200.00	..	
<i>B. Urban Water Supply Kashmir Srinagar city (spill-over schemes):</i>						
1. 27" dia c.c. pipe from Forebay to Filtration Plant at Alusteng	35.00	23.56	11.44	11.44	..	
2. Construction of 3rd service conduit from Harwan to Nishat	22.21	18.20	4.01	4.01	..	
3. Supplementing Water Supply to Srinagar city from Dudh-ganga	59.09	49.76	9.33	9.33	..	
4. Augmentation of W.S to Sgr. city (part I&II)	207.50	0.52	105.48	105.48	..	
<i>New Schemes:</i>						
Construction of approach road to Dudh-ganga	10.00	..	7.50	7.50	..	
Total Sgr. city	333.80	92.04	137.70	7.76	...	
<i>Anantnag Town (Spillover scheme):</i>						
Augmentation of W. S. Anantnag Town	60.00	7.00	53.00	53.00	..	
<i>Baramulla Town (New Scheme):</i>						
Augmentation of W. S. Baramulla Town	54.00	--	54.00	54.00	..	
<i>Common Item Works:</i>						
1. Improvement and Extension of existing W.S. in other towns of Kashmir	30.00	..	30.00	30.00	..	
2. Establishment, T&P, Surveys, etc.	25.24	..	25.24	25.24	...	
Total B(i.e Urban Water Supply Kashmir)	503.04	99.04	300.00	300.00	..	
Grand Total A & B (i.e Urban Water Supply Jammu & Kashmir)	847.85	161.85	500.00	500.00	..	

4. Rural Water Supply

Supply of protected drinking water to the people has been accepted as one of the basic minimum needs. In the State of Jammu and Kashmir, excluding Ladakh District there are 6,583 villages with a population of 38.16 lakhs according to 1971 census. The total outlay approved for the Fourth Plan for drinking water supply schemes, both urban and rural is Rs. 618 lakhs against which the anticipated expenditure is likely to be of the order of Rs. 849.00 lakhs of this the expenditure on Rural Water supply is expected to be around Rs. 629.31 lakhs.

By the end of the Fourth Plan 682 villages and 133 mohras are expected to be covered by protected water supply (A Mohra is an isolated portion of a village not identified as an individual village in the census records). This does not include 129 such villages expected to be covered under the Centrally Sponsored "Accelerated Rural Water Supply Programme". under this Centrally Sponsored Programme schemes costing around Rs. 209 lakhs have been sanctioned by the Government of India and funds to the tune of Rs. 170 lakhs have been made available for the purpose. These schemes are expected to be completed during the first two years of the Vth Plan. This would mean that only about 12% of the villages shall be covered by the end of the Fourth Plan.

In Kashmir region the past several years of drought have shown that even the

few villages located near springs and rivulets and previously supposed to be having some drinking water facilities, had to face serious difficulties due to depletion of discharge in the springs, and the drying up of the rivulets. Water had to be carried to a number of such villages by trucks and tankers from different sources. Taking the quality of water into account there is hardly a village that can be classified as advantageous, as water wherever available within 2 kilometres distance or a lift of 50 ft. is generally unhygienic and not absolutely safe for drinking purposes.

In the Jammu region the Kandi belt located between the altitudes of 1,000 ft. and 2,600 ft. above MSL is dry, generally rugged and broken and intersected by nallahs which go dry for the most of the year excepting in rainy season when they become torrential. This perhaps is the worst hit area in this region in respect of drinking water facility. The main sources of drinking water in this area are the local ponds which get filled up with rain water during the monsoons. During the hot summer days, therefore, people have to foot miles to fetch water.

Looking at the problem in this background it is essential that facilities of hygienic and dependable water supply to all the villages during the Fifth Five Year Plan are provided. This may, however, not be an attainable goal on account of the inadequate funds available for this sector in the Fifth Plan.

Fifth Five Year Plan

The allocation of Rs. 2,000 lakhs for Rural Water Supply has been distributed between the two regions as under :—

Kashmir	Rs. 9.55 crores
Jammu	Rs. 10.45 crores
Total :	<u>Rs. 20.00 crores</u>

As many as 120 Water Supply schemes from the Fourth Plan shall spill-over to the 5th Plan and an amount of Rs. 517.410 lakhs is proposed for these schemes for the Fifth Plan. An amount of Rs. 226.63 lakhs is the estimated cost on account of establishment, tools, equipment, surveys and investigations etc. leaving an amount of about Rs. 1720.960 lakhs for new schemes to be taken up in the Fifth Plan. The proposals in respect of new water supply schemes have therefore, to be tailored to

this available balance. The total number of villages expected to be covered by protected water supply during the Fifth Plan period with this limited financial outlay is estimated at 900 (472 in Kashmir and 428 in Jammu region).

The schemes proposed to be taken up in the Fifth Plan are based on general surveys and the data available. These schemes are expected to cover by and large, the worst of the disadvantageous villages. Detailed surveys are afoot. Wherever feasible action will be taken to co-ordinate the Rural Water Supply schemes with minor irrigation works.

In respect of skilled and unskilled labour it has roughly been calculated that the requirements thereof during the Fifth Plan period would be 40,74,667 man-days in the Kashmir region (3,61,333 skilled and 36,13,334 unskilled) and 38,86,800 man days in Jammu region (3,53,300 skilled and 35,33,500 unskilled).

— — —

RURAL WATER SUPPLY SCHEME-WISE OUTLAY FOR THE FIFTH PLAN 1974-79

S. No.	Head/Sub-head/Scheme	(Rs. in lakhs)				
		Total estimated cost	Anticipated expenditure ending 4th Plan	5th Plan approved		Outlay Foreign Exchange
1	2	3	4	Total	Capital	7
RURAL WATER SUPPLY KASHMIR						
I. SRINAGAR DISTRICT						
(A) SPILL OVER SCHEMES						
1.	Water supply Phak area	16.04	7.86	8.18	8.18	..
2.	Water Supply Water hail Soibugh.	2.00	0.06	20.00	20.00	..
3.	Water Supply Baghati-Kanipur (Part I)					..
	-do- -do- (Part II)	54.12	3.96	13.50	13.50	..
4.	W. S. Kalwal pura Beru	4.57	1.43	3.14	3.14	..
5.	W. S. Kanir	3.89	1.00	2.89	2.89	..
6.	Impt to W S Charisharief	29.20	2.70	5.00	5.00	..
7.	W. S. Kremshore	2.82	0.90	1.92	1.92	..
8.	W S Draygam	4.15	1.90	3.25	3.25	..
9.	W. S. Sangam Palapura	12.50	0.05	12.45	2.45	..
10.	W. S. Rakshilna	10.00	8.26	1.74	1.74	..
11.	W. S. Sherpathri (Gib)	8.00	7.64	1.36	0.36	..
12.	W. S. Telbal	5.00	2.23	2.77	2.77	..
13.	W. S. Balhama	3.16	2.95	0.21	0.21	..
14.	W. S. Gulti Bagh	3.10	1.48	1.62	1.62	..
15.	W. S. Kushipura	2.15	1.10	1.05	1.50	..
16.	W. S. Kakawring	0.85	0.70	0.15	0.15	..
17.	Impt. & Extn. from existing W. S. schemes	1.00	0.50	0.50	0.50	..
Total (Spill-over Schemes in Srinagar District.)		189.64	44.62	78.73	78.73	..
(B) NEW SCHEMES (SGR DISTT.)		N. A.	..	109.44	109.44	..
Total (Water Supply Srinagar District)		189.64 (£)	44.62	188.17	188.17	..

II. ANANTNAG DISTRICT

(A) SPILL-OVER SCHEMES

1.	W S keshinagri Ramnagri	7.42	3.38	4.04	4.04	..
2.	W. S. Manual Zora	11.48	4.03	7.45	7.45	..
3.	Regl W S. Aripal Tral	31.50	6.20	25.30	25.30	..
4.	W. S. Larnoo Batapura	4.21	1.61	2.60	2.60	..
5.	W. S. Rattanipura Lajoura	12.36	1.25	11.11	11.11	..
6.	W. S. Branti Balapora	4.21	1.25	2.96	2.96	..
7.	W. S. Khayar Shumhal	3.27	1.43	1.84	1.84	..
8.	W. S. Ladoo Shar	5.12	1.75	3.37	3.37	..
9.	W S Krandiwara	7.21	2.25	4.96	4.96	..
10.	W. S. Padga npura (Tokuna)	6.89	1.00	5.89	5.89	..
11.	W S Kred	3.97	2.70	1.27	1.27	..
12.	Construction of Div Office Building Bijbehara	8.73	2.90	5.83	5.83	..

£ Excludes estimated cost of new schemes.

1	2	3	4	5	6	7
13.	W. S. Jalipure Sympahan	3.33	1.70	1.63	1.63	..
14.	Regl. W. S. Chowgam Qazigund	16.29	6.43	9.86	9.86	..
15.	W. S. Damhal Hanjipura	11.71	10.93	0.78	0.78	..
16.	Impt. & Extension of Existing W. S. Anantnag Distt.	6.36	4.68	1.68	1.68	...
17.	W. S. Padgampura Dangepora	6.00	1.08	5.12	5.12	..
18.	W. S. Bindoo Zalaugam	3.07	1.50	1.57	1.57	..
19.	W. S. Wangund Chakiwangund	2.58	1.30	1.28	1.28	..
20.	W. S. Hatigam	4.77	3.50	1.27	1.27	..
21.	W. S. Khirram Novshera	7.50	1.00	6.50	6.50	..
22.	W. S. Kanilwan Krandidgam	4.88	2.65	2.23	2.23	...
23.	W. S. Okura	5.52	1.35	4.17	4.17	..
24.	W. S. Singhapura Magam	1.75	0.20	1.55	1.55	..
25.	W. S. Shirpura Ariwani	3.85	0.20	3.65	3.65	..
26.	W. S. Adhal	3.93	1.30	2.63	2.63	..
27.	W. S. Brah and Rakhi Brah	3.15	1.50	1.65	1.65	..
28.	Providing of Diesel pumping set at Bijbehara	0.53	0.47	0.06	0.06	..
29.	W. S. Pazgam	1.53	1.00	0.53	0.53	..
30.	W. S. Thamankote	16.60	16.12	0.48	0.48	..
31.	W. S. Arihal Sherpithri	51.93	34.77	17.16	17.16	..
Total Spill over Schemes Anantnag District)		261.85	121.43	140.42	140.42	..
B. NEW SCHEMES (DISTRICT ANANTNAG)		N. A.	—	190.53	190.53	..
Total (Water Supply, Anantnag District)		261.85 (£)	121.43	330.95	330.95	..

III. BARAMULLA DISTRICT

A. Spill-over Schemes:

1.	W. S. Magam Narbal	18.00	15.74	2.26	2.26	..
2.	Aug. W. S. Sopore	37.47	26.21	11.26	11.26	..
3.	W. S. Sonawari Zone I	16.00	10.17	5.83	5.83	..
4.	W. S. Pandith Pura Yaru	8.09	6.45	1.64	1.64	..
5.	W. S. Tangmarg	2.76	1.19	1.57	1.57	..
6.	W. S. Krari	2.78	1.27	1.51	1.51	..
7.	W. S. Binner	1.44	1.26	0.18	0.18	...
8.	W. S. Bandipura, Kalusa	16.60	2.03	14.57	14.57	..
9.	W. S. Bamrada	5.36	3.20	2.16	2.16	..
10.	W. S. Wanigam Lolipura	6.00	2.26	3.74	3.74	..
11.	W. S. Rajwar	18.77	16.37	2.40	2.40	...
12.	W. S. Kralwath Chakura	5.14	4.52	0.62	0.62	..
13.	W. S. Dever Yakhminpura	3.00	2.00	1.00	1.00	..
14.	W. S. Ahmedpura (Goom)	2.22	1.53	0.69	0.69	..
15.	W. S. Sonawari Zone II	42.00	36.72	5.28	5.28	..
16.	Impt. to W. S. Trehgam	2.27	1.78	0.49	0.49	..
17.	W. S. Mawar Bala	1.49	1.20	0.29	0.29	..
Total (Spill-over schemes in Baramulla Distt.)		189.39	133.90	55.49	55.49	..
B. New Schemes (Boramulla Distt.)		N. A.	—	235.39	235.39	..
Total (Water Supply, Baramulla Distt.)		189.39 (£)	133.90	290.88	290.88	..

£:—Excludes estimated cost of New schemes

2	3	4	5	6	7
COMMON ITEM WORKS					
Impt. & Extn. from Existing W. S. Schemes in Kashmir Province.	N.A.	—	25 00	25.00	—
Installation of Hand pumps Kashmir Province	N.A.	—	2 00	2.00	—
Exploration of T. N. in Kashmir Province.	N.A.	—	8 00	8.00	—
	N.A.	—	35 00	35 00	—
COMMON ITEMS					
Establishment Charges	80.00	—	80.00	80.00	—
Tools and Plant	25.00	—	25.00	25.00	—
Surveys	5.00	—	5.00	5.00	—
	110.00	—	110.00	110.00	—
G. Total Rural Water Supply Kashmir	750.88(£)	297.95	955 00	955 00	—

RURAL WATER SUPPLY-JAMMU					
(A). Jammu District Spill-over Scheme.					
W.S. Scheme Kaleeth.	4.96	49 06	0.052	0.052	...
Water supply scheme Bruie.	1.90	1 573	0 327	0.327	..
" " R. S. Pura.	6.14	3 997	2.143	2.143	...
Improvement W.S. Akhnoor.	3.50	3.396	0.104	0 104	...
W.S. Scheme Raja Chack					
Trota Phalla	3.00	2 580	0.420	0 420	...
W.S. Scheme Nadwal and Clay.	5.00	3 113	1.397	1.397	..
W.S. Scheme Birmini and Ratti Sarara	2.00	2.021	0.899	0 899	...
W.S. Scheme Kana Chargal.	3 00	0 284	2.716	2.716	..
W.S. Scheme Gratal and Miran Munderian	12.00	5.530	8.470	8.470	..
Ext. from Kanhal T	3.34	0.911	2.429	2.429	..
" " Tubewell/Dugwell.	1.57	1.533	0.37	0.37	...
W.S. Scheme Bhagti Barda.	2.60	1.956	0.664	0.664	...
W.S. Scheme Jagti and Nagrota	12.50	0.559	11.941	11.941	..
W.S. Scheme Doogian	1.60	1.220	0.380	0.380	..
W.S. Scheme Chatha and Gadigar	1.05	0.899	0 151	0.151	...
W.S. Scheme Khrota.	0.58	0.493	0 087	0.087	...
Water supply scheme Darmanda and Barnai	1.31	0 786	0 524	0 524	...
" " Kangar and Clay.	2.00	0 050	5 950	5.950	..
" " Upper Thather	0.91	0 510	0 400	0 400	..
" " Shiva Patta.	1 25	0.800	0 450	0 450	..
" " Chatta.	7.00	2.580	0 411	0 411	...
" " Nadore	3.75	3.695	0.055	0.055	..
Ext from Arnia Tubewell.	0.52	0.560	0.160	0.160	..
" " Kaheri T. well.	2.68	0 600	2.080	2 080	..
W.S. Scheme Darochan — Burn.	9.92	7 209	2.711	2 711	...
W.S. Scheme Rakh Amb Tall.	4.50	3 582	0 918	0 918	..
Sinking of 2nd T W at Dagore.	5 05	3.513	1.537	1.537	..
" " Ranjan.	3.50	1.518	1.982	1.982	...
" " 3rd T W. Samba.	3.72	0.600	3.120	3.120	...
" " at Manani	8.90	3.790	0.110	0.110	..
Total spill-over scheme Jammu Distt. (State Plan)	124.67	72.065	52.605	52.605	..
£:— Excludes estimated cost of new schemes					

1	2	3	4	5	6
<i>Spill-over schemes Accelerated R.W.S Programme.</i>					
1. W. S. Scheme Chowki Chora.		19.92	8.201	11.719	11.719
2. " " Kaluchack		9.81	6.996	2.814	2.814
3. " " Sandhi Sumbli]		14.72	8.892	5.828	5.828
4. " " Kamila		7.05	5.902	1.148	1.148
5 Purchase of Rigs and const. of work shoo.		19.54	8.553	10.987	10.987
<i>Total spill over scheme Accelerated rural W. S Programme.</i>		71.04	38.544	32.496	32.496
Total (spill over schemes Jammu Distt.): -		195.71	110.609	85 101	85 101
(B). New water supply schemes Jammu Distt.: -		N.A	..	172'310	172 310
Total (Water Supply Jammu Distt): -		195.71(£)	110.609	257.411	257.411

II.(A). Kathua District/Spill-Over Schemes.

1. Improvement W.S Kathua town.	8.51	2.762	5.748	5.748
2. W. S. Scheme Chew Banglow.	1.25	1.00	0.150	0 150
3. W. S. Scheme Sadrota.	1.56	1 005	0.555	0 555
4. W. S. Scheme Mandli Drung Didwara.	6 55	1.043	5.507	5.507
5 Ext- from Palial Tubewell.	3.32	1.664	1 656	1.656
6. W. S. Scheme Gurah Suraj.	1.70	1.219	0.481	0.481
7. W. S. Scheme Billwar.	6.60	0.651	5.949	5.949
8 W. S. Scheme Bhaiya	0.54	0.273	0.267	0 267
9. W. S. Scheme Dinga Amb&Manglore.	7.00	2 677	4.323	4 323
10. W. S. Scheme Preta.	4.80	0.759	4.041	4 041
11. " " Nagrota.	2.00	0.759	1.241	1.241
12. " " Mandla.	1.80	1.050	0.750	0.750
13. " " Mela Khurd.	0 63	0 482	0 145	0.148
14. " " Rajpura.	2.32	1 543	0 777	0.777
15. " " Jandota.	3.36	0.600	2.760	2.760
16. Sinking of 2nd T. W at Jatwal.	3.92	2.325	1.595	1.595
17. " " tubewell at Dannore.	3.65	0 500	3.150	3.150
18. " " at Jasrota	3.56	3.199	0.361	0.361
Total spill-over/scheme Kathua Distt. (State Plan)	59.07	23 611	39.459	39 459

Spill over accelerated R.W.S Programme:

1. W S. Scheme Koli Bari.	14.40	9.557	4.843	4 843
Total spill-over accelerated RWS programme.	14.40	9.557	4.843	4.843
Total (spill-over/schemes Kathua Distt.)	77.47	33.168	44.302	44.302
(B) New Water Supply Schemes Kathua Distt:—	N.A	..	123 040	123.040
Total (Water supply Kathua Distt) :—	77.47(£)	33.168	167.342	167 342

	2	3	4	5	6	7
<i>(A) Poonch Distt Spill-over schemes</i>						
W.SS Swarankote						
Impvt. W S. Scheme Poonch.		4.50	2.560	1.940	1.940	...
(3.80+3.67)		7.47	2.264	5 206	5 206	...
WSS Shilla Dangri		1.75	0.723	1.027	1.027	...
WSS Noona Bandi		1.22	1.000	0.220	0.220	...
Total spill-over scheme Poonch		14.94	6.547	8.393	8.393	...
Distt. (State Plan)						

Spill-over Schemes Accelerated tws Programme :

WSS Mandi (Poonch)	11.52	8.450	3.070	3.070	...
WSS Mankote	2.37	2.127	0.243	0.243	...
Total spill-over accelerated					
RWS Programme	13.89	10.577	3.313	3.313	...

Total (spill-over Schemes Poonch Distt.)	28.93	17.124	11.706	11.706	..
--	-------	--------	--------	--------	----

<i>(B) New Water supply schemes Poonch Distt:-</i>					
	N. A.		65.990	65.990	...
Total (Water Supply Poonch Distt.)	28.93(£)	17.124	77.696	77.696	..

(A) Rajouri Distt- spill-over Scheme :

WSS Lambari Dandsar	5.10	3.987	1.113	1.113	..
WSS Sunderbeni	2.00	1.579	0.421	0.421	..
W. S. Scheme Dangri	6.00	4.000	1.992	1.992	—
W. S. Scheme Dharamshalla	4.50	2.658	1.850	1.850	—
W. S. Scheme Solki	3.00	0.584	2.416	2.416	—
W. S. Scheme Banoti	0.862	0.590	0.272	0.272	—
W. S. Scheme Nadian	4.84	0.965	3.875	3.875	—
W. S. Scheme Chowki Nikka	3.98	1.982	1.998	1.998	—
W. S. Scheme Darhal Topa	2.68	1.000	1.680	1.680	—
W. S. Scheme Doda	3.00	0.800	2.200	2.200	—
W. S. Scheme Behrota	5.00	0.800	4.200	4.200	—
W. S. Scheme Panhad	2.00	0.400	1.600	1.600	—
W. S. Scheme Shadhra	2.72	0.400	2.320	2.320	—
W. S. Scheme Liran	7.00	0.500	6.500	6.500	—

Total Spill-over Scheme Rajouri District (State Plan)	52.682	20.245	32.437	32.437	—
£ Excludes estimated cost of Ngw Schemes:-					

1	2	3	4	5	6	7
SPILL-OVER SCHEMES ACCELERATED R. W. S. PROGRAMME.						
1.	W. S. Scheme Thana Mandi	5.00	4.027	0.973	0.973	—
	Total Spill-over Accelerated R. W. S. Programme :	5.00	4.027	0.973	0.973	—
	Total Spill-over Schemes Rajouri Disst.) :—	57.682	24.272	33.410	33.410	—
(B)	New Water Supply Schemes Rajouri Distt.:-	N. A.	—	100.990	100.990	—
	Total Water Supply Rajouri Distt :—	57.682(£)	24.272	134.400	134.400	—

V. (A) DODA DISTRICT/SPILL-OVER SCHEMES

1	Impvt. W. S Bhaderwah	4.63	4.445	0.185	0.185	—
2.	W. S. Scheme Kud and Batote	12.50	9.583	2.917	2.917	—
3.	W. S. Scheme Dhar Bugga	0.82	0.683	0.137	0.137	—
4.	W. S. Scheme Chilli Bhalla	0.87	0.767	0.103	0.103	—
5.	W. S. Scheme Kandote	2.25	1.420	0.830	0.830	—
6.	W. S. Scheme Dharah	1.07	0.762	0.308	0.308	—
7.	W. S. Scheme Nowgam	0.97	0.772	0.208	0.208	—
8.	W. S. Scheme Bhella	0.72	0.708	0.062	0.062	—
9.	W. S. Scheme Sarrounda	8.05	1.901	6.149	6.149	—
10.	W. S. Scheme Maitra (Ramban)	2.00	0.429	1.551	1.551	—
11.	W. S. Scheme Beoli	2.16	1.303	0.857	0.857	—
12.	W. S. Scheme Kastigarh	2.50	2.063	0.437	0.437	—
13.	W. S. Scheme Kalhota	1.71	0.780	0.930	0.930	—
14.	W. S. Scheme Gurmāl	1.53	0.908	0.622	0.622	—
15.	W. S. Scheme Diggi	3.00	0.100	2.900	2.900	—
16.	W. S. Scheme Tipri Karyani	2.06	0.500	1.560	1.560	—
17.	W. S. Scheme Acher Bhalla	1.50	0.100	1.400	1.400	—
18.	Extention from Batote Water Supply	0.59	0.434	0.156	0.156	—
	Total Doda District Spill-over Schemes (State Plan)	48.98	27.668	21.312	21.312	—

SPILL-OVER SCHEMES ACCELERATED R. W. S.

1.	W. S. Scheme Kishtwar	15.98	12.252	3.728	3.728	—
	Total Spill over A. R. W. S. Programme:—	15.98	12.252	3.728	3.728	—
	Total (Spill-over Scheme Doda Distt.) : -	64.96	39.920	25.040	25.040	—
(B)	New water Supply Schemes Doda District.	N. A.	—	103.480	103.480	—
	Total (Water Supply Doda District);—	64.96(£)	39.920	128.520	128.520	—

£ Excludes estimated cost of new schemes:

1	2	3	4	5	6	7
---	---	---	---	---	---	---

VI (A) UDHAMPUR DISTRICT/SPILLOVER SCHEMES.

1. Intergrated water supply scheme Nandni, Dansal, Suel Patwar area etc.	25.00	11 972	13 028	13 028	—
2. W. S Scheme Chinas	1.89	1.781	0.109	0.109	—
3. W. S. Scheme Jasmota	14.93	9.345	5.585	5.585	—
4. W. S. Scheme Chowki Jandroad	3.80	2.019	1.781	1.781	—
5. W. S. Scheme Devi Garh	1.87	0.910	0.960	0.960	—
6. W. S. Scheme Sirla Karin	3.83	2.260	1.570	1.570	—
7. W. S. Scheme Sajroo	9.89	0.971	8.919	8.919	—
8. W. S. Scheme Jadd	1.18	0.806	0.374	0.374	—
9. W. S. Scheme Kalsora	0.79	0.564	0.226	0.226	—
10. W. S. Scheme Mongri	0.39	0.273	0.117	0.117	—
11. Impvt. & Extensi n	0.70	0.629	0.071	0.071	—
12. W. S. Scheme Chunta Gali	0.63	0.543	0.137	0.137	—
13. W. S. Scheme Jangalgali	0.39	0.345	0.045	0.045	—
14. W. S. Scheme Manote	0.84	0.676	0.164	0.164	—
15. W. S. Lower Basnote	0.45	0.182	0.268	0.268	—
16. W. S. Scheme Akhli Buttan	5.00	1.000	4.000	4.000	—
17. W. S. Scheme Sirla, Kotli & Palli	5.00	1.000	4.000	4.000	—
18. W. S. Scheme Shidole Kherigali	2.50	1.000	1.500	1.500	—
19. Installation of Filtration Plant at Katra	3.50	0.160	3.340	3.340	—
Total Spillover Schemes Udhampur District (State Plan)	82.63	36.436	46.194	46.194	—

SPILLOVER SCHEMES ACCECIERATED R.W S PROGRAMME

1. W. S. Schemes Jaganoo	9.82	8.803	1.017	1.017	—
Total Spillover Aceelerated Rural Water Supply Programme.	9.82	8.803	1.017	1.017	—
Total (Spillover Schemes Udhampur Distt.)	92.450	45.239	47.211	47.211	—
(B) New Water (Supply Udhampur Distt.)	N.A.	—	115.790	115.790	—
Total (Water Supply Udhampur Distt.)	92.450	45.239	163.001	163.001	—

VII. COMMON ITEMS :

1. Establishment charges	100.000	—	100.000	100.000	—
2. Tools & Plants	6.630	—	6.630	6.630	—
3. Surveys	10.000	—	10.000	10.000	—
Total (Common Items Jammu Province W S.	116.630	—	116.630	116.630	—
G. Total Rural Water Supply Jammu :—	629.834	270.332	104.500	1045 0 0	—
G. Total (Rural Water Supply Jammu and Kashmir.)	1380.71(£)	568.28	2000.00	2000.00	—

£ Excludes estimated cost of new schemes :

5. Housing & Urban Development

(a) *Housing*

The anticipated expenditure during the Fourth Plan is Rs. 2.28 crores as against an approved provision of Rs. 2.95 crores. The under utilisation has to be traced mostly to the scheme of land acquisition and development under which about Rs. 52 lakhs would be the shortfall. Very little land has been acquired during the Fourth Plan for setting up new colonies in the State. During the Fifth Plan an outlay of Rs. 300 lakhs has been approved with Rs. 60 lakhs for the first year of the plan. The highlight of the programme is the provision on account of housing sites for landless and houseless population of rural areas.

The scheme for rural housing was initiated about two years back in the country. In absence of reliable data and a comprehensive project report, it has not been possible to avail of the central assistance available under the scheme. The project report is expected to be drawn up shortly on the basis of the information now collected. It is estimated that about 20,000 rural houseless families are in need of housing sites. It is proposed to acquire land for the purpose in the areas where Government land is not available and develop housing sites, at an approved outlay of Rs. 50 lakhs during the Fifth Plan.

During the Fourth Plan we had envisaged to complete Soura and Botakadal housing colonies meant for setting of dwellers in slum areas. The work has not, however

been completed and it is proposed to have Rs. 10 lakhs for this purpose during the Fifth Plan.

It is also proposed to acquire and develop land at Kralpora and Bachpora in Srinagar and Kaloo Chak and Bari Brehmna in Jammu city by way of developing satellite towns.

(b) *Urban Development*

The Urban Development programme has recently been taken up in our State. For this programme a provision of Rs. 600 lacs has been proposed for the Fifth Five Year Plan. This includes Environmental Improvement of Srinagar city which comes within the purview of minimum needs programme and the important project of Nallah Mar in Srinagar city. The total cost of Nalla Mar Project is about Rs. 536 lacs out of which Rs. 332 lacs are expected to be obtained from HUDCO as loan assistance. The balance of Rs. 204 lacs is mostly meant for land acquisition and construction of roads and are to be financed from the plan resources. The Environmental Improvement Programme in our State was initiated at the close of 1972-73. It was taken up in Srinagar city (as a Central project) and also in Jammu city. It is intended to extend this programme to some other urban areas like Udhampur, Poonch, Sore, Anantnag and Baramulla. The programme envisages the provision of following basic minimum facilities to the weaker sections of the society.

1. Sanitation and drainage.
2. Drinking water supply.
3. City lighting.
4. Elementry schools.
5. Recreation facilities.
6. Roads and lanes.
7. Transport.
8. Primary health.

The loan assistance to Local Bodies which has also been continued during the Fifth Plan is meant for generation of remunerative assets. There are about 45 local bodies including 3 Municipalities and 5 Town Area Committees. With the loan assistance provided these local bodies can hardly undertake and complete any remunerative assets within a period of 3 years. With the coming up of elected bodies in Municipalities and Town Area Committees the Local Bodies are keen to generate adequate remunerative assets. They therefore need to be financed so as to make them self reliant.

Provision has also been made for "Infrastructure for master plans of Jammu and Srinagar cities". Master plan of Srinagar city has already been published, for inviting comments of the General public and is likely to be finalised shortly. The draft of Master Plan of Jammu city which is under preparation is likely to be ready for publication very shortly.

In addition to the above, the Urban Development Sub-Sector includes provision for preparation of regional plans and strengthening of organisational set up. The Urban Development Department has

started functioning only from last year. With the expansion of its activities, the organisational set up of the office of the Commissioner for Housing and Urban Development Department and its sub-ordinate organisations like Town Planning and State Architect will have to be strengthened suitably and funds for the purpose have been provided.

5. Rail Head Complex

Rail Head Complex of Jammu city has wide potentialities of development. The area involved is about 3,000 acres. This area has already been notified under the Jammu and Kashmir Town Planning Act in order to avoid haphazard growth of construction which, otherwise, was bound to happen with the coming up of Railway Station quite in the midst of this area. The Development Authority, Jammu proposes to develop this area by phases. In the first phase they like to acquire apart of the area, provide developmental facilities and then dispose it off by laying down of Housing Colonies, provision for sites for various commercial purposes like hotels, cinemas, stores, shops-cum-flats. etc.

Revolving funds to Development Authorities

A provision of Rs. 50 lacs has been earmarked in the plan to provide seed capital/ revolving funds to two Development Authorities at Rs. 25/- lacs each. To meet the cost of acquisition of land etc. till such time the two Development Authorities become self generating.

ANNEXURE 1

Schemewise outlay for the 5th Five Year Plan

Rs. in lakhs

Head/Sub-Head/ Scheme	5th Plan approved Outlay			
	Total Capital		F. Ex	
2	3	4	5	
HOUSING				
1. Subsidized Industrial Housing Scheme.	10.00	..	..
2. Low Income Group Housing Scheme	100.00	100.00	...	
3. Middle Income Group Housing scheme	130.00	130.00	..	
4. Land Acquisition & Dev				
5. Slum Clearance	10.00	..	...
6. Housing sites for landlesses/Houseless/rural areas. (Minimum needs programme)	50.00	50.00	..	
7. House Building Advance	..	..	..
Total	300.00	280.00	..	

URBAN DEVELOPMENT

Preparation of Master Plan & Regional Plans.	15.00	..	..
Loans & grants to Local Bodies for Dev. Scheme	50.00	50.00	..
Implementation of development Schemes in Master Plan			
a) Infrastructure for Master Plan	15.00	..	..
b) Rail Head complex	20.00	20.00	..
c) Spill-over Scheme Nallah Mar	184.00	184.00	..
Other Schemes			
Environmental Improvement			

a) Srinagar City (Minimum Needs Programme)			
i) Rajouri Kadal Block			
ii) Maisuma Block			
iii) Kehbab Sahib/Salihgaiwan Block	180.70	130.00	..
iv) Zaina Kadal Block			
v) Jamia Masjid Block			
vi) Hazratbal Block			
vii) Other Blocks to be specified later on.			

b) Jammu city			
(i) Rehari Block			
(ii) Krishna Nagar Block			
(iii) Talab Tiloo Block			
Other blocks to be specified later on	50.00	..	..

C Other towns	..	96.00	..
---------------	----	-------	----

5 Strengthening of Organisation of Housing and Urban Development and its subordinates organisations	40.00	..	..
Total Urban Development	600.00	220.00	

ANNEXURE II

Selected Physical Targets

Head/ sub-head/Item	Unit	Base level 1973-74	5th plan target (level) 1974-79
1	2	3	4
1. Low Income Group Housing Scheme	Houses (Nos)	—	2000
2. Middle Income Group Housing Scheme	-do-	—	500
3. Industrial Housing Scheme		—	..
4. Slum clearance	Houses Nos.	—	200
5. Village Housing		..	..
6. Land Acquisition & Development.	Hect	—	16 Hect.
Urban Development			
Nallah Mar			
Sewerage and Drainage facilities (population served)	lac souls	—	1.80

6. Backward Classes and Social Welfare

Jammu and Kashmir has a total population of 46,16,632 according to 1971 Census out of which 3,81,277 are Schedule Castes which is about 8% of the total population. The literacy rate among the scheduled castes in Jammu & Kashmir is approximately 8% against 18.3% amongst the general population. The low rate of literacy among the general as well as Scheduled Caste population is due to the fact that it is one of the most Backward State educationally and economically although the expansion of education has been very rapid in the State during past years. The literacy according to 1971 Census was only 18.3% against the all India level of 29.4%. The children of poor parents in backward areas are a part of the family labour pool and even if educational facilities are provided these are not availed of in some cases. It is therefore, necessary to provide incentives to such children like scholarships, school uniforms, books etc; during the 5th Plan. There are some backward pockets like Gurez, Karnah, Gool Gulabgarh, Bani, Rajouri and Poonch etc. which have not received the benefits of economic/educational development to the desired extent. Our approach in the Fifth Plan will, therefore, be centred on balancing investment efficiency and Social security which shall be ensured through multi-level planning. Therefore special programmes for the development of these backward areas will be introduced in order to bring these areas

into the main stream of Socio-economic development of the State.

The programmes proposed during the Fifth Five Year Plan period will be in addition to the employment and training programme in other sectors. It is estimated that over half of the population of the State is living below the subsistence level of consumption. The problem of poverty is thus enormous. Out of this, the population of scheduled castes is about 3.81 lakhs who are already covered by the programmes of the Social Welfare Department to the extent possible. It has, therefore, been considered necessary to make a beginning in respect of other economically backward sections of the community also.

Rs. 60.00 lakhs were provided for the Fourth Plan for the Welfare of Backward Classes of which Rs. 51.82 lakhs are anticipated to be spent ending 1973-74. Against the total allocation of Rs. 25.00 lakhs approved under Social Welfare sector during Fourth Five Year Plan Rs. 23.07 lakhs are anticipated to be spent ending 1973-74.

The physical achievements made during the plan period are given below sector-wise :—

A. Welfare of Scheduled Castes

Educational uplift Pre-Matric Scholarship/Educational tours.	25,000 students covered upto 1972-73, 5000 anticipated 1973-74 Total -300,000
2. Economic uplift	2 cottage Industry Centres established; 375 trainees trained.
3. Health, Housing and other schemes.	4. Community centres established.

B. Welfare of other Backward Classes

1. Prematric scholar, ship/educational tours.	20,000 students covered upto 72-73 5000 anticipated 1973-74 total 25,000.
2. Economic Uplift-	3 Cottage Industry Centres es- tablished
3. Health, Housing & other schemes	1 Ashram School set up, intake capacity of 2 Ashram Schools (old) increased by 25 inmates.

During the Fifth Plan Rs. 120.00 lakhs i.e. Rs. 55.00 lakhs for Welfare Programmes of Scheduled castes and Rs. 65.00 lakhs for Welfare programmes of other backward classes will be provided.

The schematic break up of this allocation is shown below :—

A. Welfare of Scheduled Castes

1. Educational uplift	30.27 lakhs
2. Economic uplift	2.93 lakhs
3. Health, Housing & Other schemes	21.80 lakhs

B. Welfare of other Backward Classes

1 Education uplift	41.39 lakhs
2. Economic uplift	16.32 lakhs
3. Health, Housing & Other schemes	6.79 lakhs
Total A & B	120.00 lakhs

Selected Physical Targets

A. Welfare of scheduled castes

	Units	5th plan target
(i) Pre-matric scholar-ships	Nos.	25,000
(ii) Housing subsidy	Nos.	210

B. Welfare of other backward classes

(i) Pre-matric scholar-ships	Nos.	30,000
------------------------------	------	--------

Social Welfare

During Fourth Five Year Plan one Bal-Ashram with an intake capacity of 25 children was established. Further the intake capacity of the two Bal-Ashrams already established prior to Fourth Five Year Plan period have been increased from 25 to 50 each. Under Social Defence Programme the State Government has enacted the Children Act. Four Social Welfare Centres have been established during the plan period bringing the total number of such centres to 37 in all. During 1973-74, nine craft centres have been established for destitute and poor women. About 270 such ladies will receive training during the last year of the Fourth Five Year Plan period. Scholarships have been sanctioned in favour of as many as five hundred handicapped students @ Rs. 5 to 45 p.m. Apart from the above prophetic aid is being given to the handicapped person for fitting up artificial limbs etc. Grants-in-aid during the plan period of about Rs. 1.63 lakhs have been given to over 20 institutions engaged in the welfare of handicapped, child welfare, welfare of the aged and infirm and women. New crafts were introduced in the three Ladies Vocational Centres established in the State. The strength of the stipen diaries was increased from 25 to 30 trainees and from 1972-73 the stipend is being paid at sliding rates ranging from Rs. 15 to 45 in order to cover maximum number of trainees for the grant of stipend as a special incentive.

An amount of Rs. 50.00 lakhs has been provided for this programme during the 5th plan. Main emphasis will be on child welfare and women's welfare programmes 8 child welfare centres, another Bal Ashram and 6 Home-cum-Training Centres for destitute Women are proposed to be set up. The schematic break up of the pro-

posed allocation is given below:—

(1) Child Welfare	18.20 lakhs
(2) Women Welfare	19.16 lakhs
(3) Social Defence	2.00 lakhs
(4) Welfare of Physically and mentally handicapped	6.23 lakhs
(5) Grant-in-aid to voluntary Organisations	1.70 lakhs
(6) Training, Research and others	2.21 lakhs
(7) Social security	0.50 lakhs
Total :	50.00 lakhs

SCHEME-WISE BREAK UP OF 5TH PLAN ALLOCATION WELFARE OF BACKWARD CLASSES AND SOCIAL WELFARE

S.No.	Sub-Head/Programme	(Rs. in Lakhs) 5th Plan Allocation.		
		Total	Capital	Foreign Exchange
I. Welfare of Backward Classes				
A. Scheduled Castes				
1. Educational Uplift	30.27	—	—	
2. Economic Uplift	12.93	—	—	
3. Housing, Health & other Schemes	11.80	6.00	—	
Total Scheduled Castes	55.00	6.00	—	
B. Other Backward Classes				
1. Educational Uplift	41.89	1.00	—	
2. Economic Uplift	19.22	—	—	
3. Housing, Health and other Schemes	3.89	3.00	—	
Total other Backward Classes	65.00	4.00	—	
Total Welfare of Backward Classes	120.00	10.00	—	
II. Social Welfare				
1. Child Welfare	18.20	—	—	
2. Women Welfare	19.16	—	—	
3. Social Defence	2.00	—	—	
4. Welfare of physically and mentally handicapped	6.23	—	—	
5. Grant-in-aid to voluntary Organisations	1.70	—	—	
6. Training Research and others	2.21	—	—	
7. Social Security	0.50	—	—	
Total (II)	50.00	—	—	

BACKWARD CLASSES AND SOCIAL WELFARE

FIFTH PLAN 1974-79

Employment (Manpower Requirements)

Category	5th Plan Target
Residential Superintendents and Cottage Industry Centres Technical Supervisors.	8 Nos
Craft Technicians	3
I/C Balwadi Programme	8
Craft Supervisor (Female)	6
Superintendent (Female)	3
Craft Assistants	6
Teachers	5
Accounts	
Junior Accountant	1
Accounts Clerk	2
Clerical	
Head Assistant	2
Senior Assistans/Store-Keepers	10
Class IV	
Orderlies/Cooks/Chowkidars/Aya/Sweepers	39
	93

7. Labour Welfare & Craftsman Training

(a) Labour Welfare

The Labour Welfare programmes aim at providing maximum benefits to the working class. These include a guaranteed minimum wage, social security benefits, security for old age, collective bargaining through the medium of trade unions, medical facilities, recreation facilities, regulated working hours, payment of bonus or incentive, etc. With these aims in view an allocation of Rs. 20.00 lakhs was fixed for the Labour Welfare schemes during the 4th Plan period. The major portion of this outlay was for the construction of Labour Complexes and Labour Sarais. These work could not, however, be pushed through for want of suitable sites. The only sarai that at Pahalgam. An expenditure of Rs. 14.97 lakhs is anticipated for the 4th plan. During the 5th plan more recreational and medical facilities will be provided in the Labour Welfare Centres in the State. Construction of Labour Complexes and Sarais as proposed for the 4th plan will be taken up. The E.S.I. Programme will also come into operation during this period. The Industrial Relations machinery at the State level will be strengthened. An allocation of Rs. 26.00 lakhs has been proposed for the Labour Welfare Programmes during the 5th plan.

(b) Craftsman Training

Programmes under this sector mainly provide for Institutional and Shop Floor Training of Skilled workers in various trades which are in constant demand in industry, rendering employment and guidance assistance to the job seekers and conducting special programmes to improve the employability of the un-employed. The main objective of craftsman training is to ensure adequate supply of the right type of skilled man-power at the right time.

An allocation of Rs. 41.00 lakhs has been fixed for Craftsman training during the 5th plan. The main stress in the 5th plan will be on the improvement of standards of training in the Industrial Training Institutes. With this in view, deficiencies in equipment in the various Institutions will be made good. Diversification of trades will also be pursued. A new industrial Institute will be set up at Udhampur which is the only District in Jammu which is without it so far. Intake capacity is proposed to be increased from about 1,288 to 1,612 by the end of 1978-79. Under the Apprenticeship Training schemes some apprentices will be deputed outside the State and some apprentices will be trained in various establishment in the State.

LABOUR WELFARE AND CRAFTSMAN TRAINING
Scheme-wise Outlay for the Fifth Plan (1974-79)

(Rs. in lakhs)

5th Plan Allocation.

A. Labour Welfare

Sub-Head/Scheme	Total	Capital	Foreign Exchange
1. Construction of Labour complexes at Srinagar/Jammu	10.84	10.84	—
2. Construction of Labour Sarai at Poonch	1.00	1.00	—
3. Construction of Labour Sarai at Katra	1.20	1.20	—
4. Establishment of Labour Welfare Centre at Poonch	0.86	—	—
5. Strengthening of Enforcement Machinery	3.70	—	—

6. Purchase of two vehicles and provision of two drivers

0.95

—

—

7. Employees State Insurance Scheme

5.45

—

—

8. Augmenting of drug grant of existing Labour Welfare Centres

2.00

—

—

Total Labour Welfare

26.00

13.04

—

B. Craftsman Training

1. Craftsman Training

40.00

9.00

—

2. Employment Exchanges

1.00

—

—

Total Craftsman Training

41.00

9.00

—

Total Labour Welfare and Craftsman Training

67.00

22.04

—

Chapter XI

Miscellaneous

I. Statistics and Evaluation

The machinery for collection of statistics and evaluation of projects was re-organised and re-constituted in 1967-68. The Department dealing with the subject is the Directorate of Statistics and Evaluation which deals with the collection of official statistics, State income estimates, estimates of working force, consumer price indices in the cities, special studies and surveys. There are gaps in the data collected by the organisation and a chronic time lag in its collection and tabulation particularly in the fields of Agriculture, Education and other Socio-economic sectors. Special studies for All India purposes are also made by the Central Statistical Organisation in various rounds but the results do not become available for years with the result that timely use cannot be made of the statistics. It is, therefore, essential that steps are taken to improve the reliability and timely availability of statistics for purposes of planning and economic analysis.

Review of the 4th Five Year Plan :

An outlay of Rs. 20 lakhs was fixed for the schemes of the Directorate of Evalua-

tion and Statistics for the Fourth Five Year Plan period. Out of which Rs. 15 lakhs were meant for Statistical Schemes and Rs. 5 lakhs for Evaluation machinery. Against this provision the anticipated expenditure under the head statistics is expected to be about Rs. 11 lakhs and Rs. 4 lakhs for Evaluation Machinery. The shortfall under expenditure has been due to late appointment of staff under various schemes. In order to train the untrained statistical staff a Statistical Training School was set up and so far 86 Junior Statistical Assistant's have been trained. A number of adhoc surveys were conducted to collect data which was not available from official records.

Fifth Plan

An amount of Rs. 53.00 lakhs for the head Evaluation and Statistics has been provided for the Fifth Five Year Plan. This provision includes Rs. 39.00 lakhs for the head Evaluation and Statistics and Rs. 14.00 lakhs for setting up of a Planning apparatus. The following schemes are proposed to be taken up during the 5th Plan.

Framing of Estimates of capital Formation:

Apart from constituting integral part of the system of National Accounts, the estimates of capital formation and savings have a direct bearing on economic policy decisions. Whereas the capital formation plays an important role in the production of wealth which is utilised by an entrepreneur in the production of further goods, the savings from an essential prerequisite for economic planning of the country.

The framing of estimates of capital formation and savings are long felt gaps in our Statistical data. These estimates could not be built up so far for want of Statistical Staff. Aware of the growing needs of these estimates, the Central Statistical Organisation, Govt. of India, have already undertaken studies at all India level on savings and capital formation. The results of these studies have already been brought out by them for the years 1960-61 to 1965-66. Similar studies have also been undertaken by different States. In order to fall in line with these States and to meet the requirements of the State and Central Governments the building of the estimates of capital formation and saving in our State has gained an added significance. An amount of Rs. 2.65 lakhs is, therefore, proposed for undertaking this exercise during the Fifth Plan.

Construction of Index of Industrial Production :

An amount of Rs. 0.70 lakhs is proposed for the scheme "Construction of Index of Industrial Production" for the Fifth Plan period.

Strengthening of the Statistical Training School

This scheme was implemented from the year 1969 in the State. So far 86 Junior Statistical Assistants have been given elementary training. In order to cover the backlog of the untrained Statistical personnel and extend training to Statistical Assistants and Statisticians, it is proposed to strengthen the training school by appointing additional trainers and provision of 15 Calculators.

Supervision of field surveys

The accuracy of survey data at the field level suffers at present due to the lack of adequate guidance and supervision on the work of primary field staff. In order to ensure effective supervision, one Jeep is required to be purchased.

Purchase of Calculators and duplicating Machines for Distt. Statistical Agencies

The District Statistical Agencies face difficulties with regard to duplicating machines and calculators. It is, therefore, proposed to provide one calculator and one hand driven duplicating machine to each of the Statistical Agency.

Special Surveys

The Directorate of Evaluation and Statistics at present is not in a position to conduct detailed surveys because of limited field and supervisory staff. It is proposed to conduct surveys like consumption studies, distributive trade, socio-economic surveys at district level, etc. for which purpose appointment of additional field and supervisory staff is necessary.

At present the Directorate has no tabulation arrangements. It has a 40 column

population unit which has out-lived its utility and needs to be replaced by an 8 column unit. The staff in the present tabulation unit has to be strengthened to man the new Unit.

Planning Apparatus

An apex planning body has been set up in the State under a non-official Chairman. This is mainly composed of Economists and specialists in various fields of Development. A State Development Council is also being set up to involve the peoples participation through their representatives. Committees for the development of Adakh, specially Backward Areas and Ujjar and Bakarwals are also being set up. Planning machinery at various levels is being strengthened to improve the process of Planning and ensure proper implementation of development schemes.

Strengthening of Evaluation Machinery

The Evaluation Studies conducted by the Directorate of Evaluation are mostly post-mortem evaluation studies of the developmental programmes after they are completed or have made some impact on the economy of the State. Such studies are of practical help to the planners who need immediate appraisal of the programme while these are in execution. In order to keep the Government informed about the working of the programmes and projects in the developmental sectors and the achievements made or bottle-necks faced in implementing these programmes, it is proposed to establish a full-fledged unit to take up concurrent evaluation for which purpose more staff is needed.

EVALUATION AND STATISTICS

(Rs. in lakhs)

Schemewise Outlay for the Fifth Plan (1974-79)

S. No.	Head/Sub-Head/ Scheme	5th Plan approved outlay	
		Total	Capital
1.	Framing of Estimates of capital formation	2.65	—
2.	Construction of state-wise Index of Industrial Production	0.70	—
3.	Strengthening of Statistical Training School.	2.75	0.30
4.	Supervision of field survey.	0.66	0.25
5.	Purchase of calculators and duplicating machines	0.35	0.35
6.	Conducting of special surveys	25.89	3.80
7.	Planning apparatus at various levels	14.00 @	0.04
Total.		47.00	4.74
8	Strengthening of Evaluation machinery.	6.00	—
Grand total.		53.00	4.74
Deduct Govt. of India's share on schemes 7 & 8 at 67%		14.00	
Total		39.00	

EVALUATION AND STATISTICS

FIFTH PLAN (1974—79)

Employment Manpower Requirements

<u>S. No.</u>	<u>Category</u>	<u>5th Plan target</u>
<i>Statistical</i>		
1	Joint Directors	2
2	Deputy Director	1
3	Assistant Directors	4
4	Statisticians	14
5	Statistical Assistants	10
6	Junior Statistical Asstts.	59

<u>S. No.</u>	<u>Category</u>	<u>5th Plan target</u>
---------------	-----------------	------------------------

Clerical

1	Superintendent	2
2	Head Assistant	1
3	Typist cum-Clerk	3
4	Accounts Clerk	1
5	Driver	1

Class IV

1	Orderlies	8
---	-----------	---

2. Information & Publicity

With a view to securing popular participation in the various planning projects, it is necessary to have an efficient information and publicity Organisation. The people should be kept informed of not only the socio-economic progress made by the state but also of the steps taken towards achieving that progress. In addition, the Government should also have at its disposal means to assess popular reaction to its plan schemes and projects. The 4th Plan outlay for Information and Publicity was Rs. 13 lakhs but the expenditure is expected to be of the order of Rs. 28.62 lakhs. During the Fifth Five Year Plan, further fillip is proposed to be given to the extension of information flow through different media so as to have a wider geographical spread and reach various categories of audiences.

2. The specific schemes included in the Fifth Plan are as under :—

(i) Written Publicity

It is proposed to circulate weekly newsletter in the languages as a properly edited round up of the press material and to distribute it to a larger mailing list. For the cyclostyled press release the mailing list is just 370 while the printed newsletter will have a mailing list of about 10,000-30,000 in English, 6,000 in Urdu and 1,000 in Dogri. These will be circulated in colleges, schools, and to important opinion leaders in towns and villages. It is also proposed to issue a weekly newsletter in Bodhi for circulation in the Ladakh District as also outside the State. For this

purpose a Bodhi unit is being set up. An offset printing machine for printing of newsletter as also charba unit is proposed to be installed.

During the Fourth Plan total number of scripts purchased from local journalists, post-graduate students and other talented persons was 14. It is proposed to further intensify this campaign and purchase at least 25 to 35 scripts on developmental activities during the years 1974-79. These scripts would be used for production of pamphlets, folders, dramas, skits and other publicity material for varying types of audiences.

During the Fourth Plan the total number of publications brought out by the Department was 80. It is proposed to intensify the advertisement and production programmes further by adding to the number of posters, brochures and folders etc. on developmental activities in the State. The total publications proposed to be produced during the Fifth Plan would be about 100.

(ii) Film Publicity

It is proposed to equip the unit properly to ensure effective utilisation of this medium and greater coverage of regional events and developments. It is also proposed to concentrate on production of material for circulation by the Field Publicity Units with a particular emphasis on development of rural and backward areas. Some documentaries are also proposed to be produced through outside producers of country-wide repute, on the approved list of the Film Division Government of India.

(iii) *Photo Publicity*

Four to five slide stories on various subjects like power Development, health services, education and agriculture production are proposed to be prepared in a year. These will be exhibited by mobile Field Publicity Units attached with District Information Centres.

(iv) *Field Publicity*

Mobile field publicity units are proposed to be created during the fifth plan, with the aim of reaching at least a village once a year. The units will be provided light weight field publicity equipment for the purpose.

(v) The workshop facilities for proper maintenance of audio visual and other equipment at the regional headquarters will be improved during the fifth plan.

(vi) *Strengthening of Song and Drama Unit*

The scheme envisages to further strengthen the Song and Drama Units in order to involve local youth talent in normal song and drama performances in the State which would ultimately switch over to the light and sound performances. It is proposed to supplement the production of theatre performances with the help of outside producers of countrywide repute by enlisting and training local youth talent. It is expected that at least one such theatre performance would be ensured with several repeated shows at District head-quarters during the each year of the Fifth Plan. The provision for mobile stage will supplement further the effort of the cultural unit to reach more areas in the country side with the cultural unit to reach more areas in the country side with the entertainment programmes which will also be the vehicle of information flow.

(vii) *Preparation of models, layouts for arranging exhibitions*

It is proposed to further equip the Exhibition Unit in order to hold 15 exhibitions during every year at District and six at Tehsil headquarters.

(viii) *Opening of Tehsil Information Centres*

6 more Tehsil Information Centres are proposed to be opened during the Fifth Plan period. In the border areas there are District/Tehsil Information Centres at Uri Poonch, Mendher and Rajouri. Proposals for special publicity arrangements for other border areas are being made during the Fifth Plan period.

(ix) Three Youth Information Centres and two Ladies Information Units are proposed to be added and two Children Niches are also proposed to be attached with Ladies Information Centres, Srinagar and Jammu.

(x) *Training and Workshop Seminars*

It is proposed to lay emphasis on training of professional hands to build up a cadre of communicators, photo journalists, film makers and field publicity Assistants. For this purpose training facilities available outside the State will be availed of. Orientation courses and seminars are proposed to be arranged for Ladies for a better awareness of the social objectives and directions of Plan developmental activities in the country in general and in the State in particular.

(xi) *Unit for feed-back and audience reaction*

It is proposed to organise systematically the collection of audience reaction and public comments for analysis trends, evaluating the information flow and formulating a plan information strategy to respond

quickly to the trends even on an anticipatory basis.

This unit will also be responsible for programme coordination with other community media operating in the State so as to ensure integrated publicity and information flow on a well conceived pattern.

INFORMATION AND PUBLICITY Schematic Breakup of Fifth Plan Allocation.

(Rs. in lakhs)

No.	Development/Head/ Sub-head	5th Plan approved outlay	Total	Capital
<hr/>				
I. Advertising and Visual publicity.				
(a) Photo Unit				
	i) Modernisation of Dark rooms	1,27,000	—	—
	ii) Photo Library			
	iii) Replacement and addition for Came- ra Equipment			
	iv) Preparation of Slide Stories & Transl- iters			
b) Exhibition Unit				
	Preparation of Models, layouts, Graphs, Photo panels etc for display in Exhibition	25,000	—	—
c) Advertisement Section				
	Strengthening of advertisement section	38,000	—	—
	Total	1,90,000	—	—
<hr/>				
II. Film production Unit				
	1. Strengthening of Film Unit	4,47,000	—	—
	2. Cost of Niagra Tape Recorder			
	3. Cost of 16 M.M. raw Stock			
	4. Cost of Lighting Equip- ment			
	Total	4,47,000	—	—

1	2	3	4
III. Cultural Unit			
1.	Restructuring of Cultural Unit	5,44,000	—
2.	Cost of Mobile Stage and Vehicles for J&K Division		
	Total:	5,44,000	—
IV. Direction and Administration			
1.	Strengthening of Planning and Coordination Section	1,31,000	—
2.	Strengthening of Administration Section	55,000	—
3.	Strengthening of Distribution Section	13,500	—
4.	Strengthening of Regional Offices.	1,02,000	..
5.	Training and Workshop Seminars	50,000	..
6.	Unit for Feedback and Audience Reaction Collection & Analysis, Study of trends integrated programme Planning and Information strategy & programme coordination with other media and performance evaluation	50,000	..
	Total	4,01,500	..
V. Written Publicity (Publication Unit).			
1.	Publication of English, Urdu and Dogri Weekly Newsletters.	3,50,000	..
2.	Strengthening of Written Publicity (Urdu) at directorate, Regional and District Offices:	3,34,500	—
3.	Purchase of Scripts from local Talent for use in pamphlets, Dramas, Skits and other publicity Media	50,000	..

1	2	3	4	1	2	3	4
4	Intensive Publicity Programme Printing of posters and Pamphlets and Brochures etc. on developmental activities.	1,00,000	..	2.	Creation of Two Tehsil Information Centres to cover the gap and to reach the remaining Tehsils Headquarters.	1,56,000	..
5	Printing and Charba Unit of Information Publicity	75,000	..	(c)	Information Centres for Ladies with Children Niches		
	Total	9,09,500	..		Creation of two Information Units for Ladies, Sub-Units for children and two Niches attached with two ladies Information centres, at Jammu and Srinagar.	2,38,000	..
VI-	Strengthening of Kashmir Bureau New Delhi and Jullunder.			(d)	Model Information Centre, Jammu.		
1.	Upgrading of KBI, New Delhi and Jullunder.	97,000	..	1.	Strengthening of Model Information Centre at Jammu.	30,500	...
2.	Strengthening of Hindi Section at KBI New Delhi and Jullunder.	41,000	..		Total :	10,14,000	..
	Total :	1,38,000	..				
VII.	Information Centre			VIII.	Field Publicity.		
a)	District Information Centres			1.	Creation of two Mobile Field Publicity Units.	2,06,000	..
1.	Creation of 2 DIC at Srinagar and Jammu	1,46,000	..		Total :	2,06,000	..
2.	Strengthening of Dist. Inf. Centre at Rajouri.	40,500	..	IX.	Construction of Auditorium and Information Set up at Srinagar, Jammu and District Headquarters.	1,50,000	1,50,000
3.	Creation of 2 Youth Information Centres attached with DIC.	92,000	..		Grand Total :	40,00,000	1,50,000
(b)	Tehsils Information Centres.						
1.	Creation of Four Tehsil Information Centres to cover the gap and to reach all Tehsil Headquarters.	3,11,000	..				

FIFTH PLAN—INFORMATION AND PUBLICITY

Employment (Man power requirements)

S. No. Category 5th Plan target

Gazetted

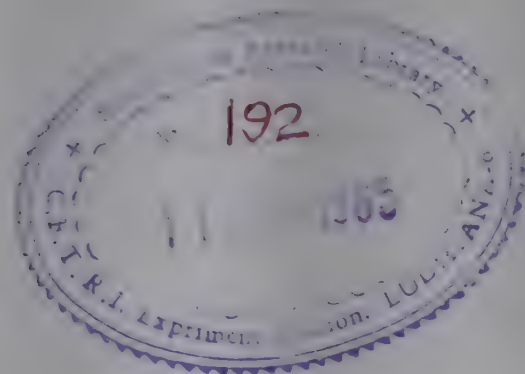
1	Dy. Director of Information (750—1350)	4
2	Dy. Director Adm.	1
3	Dy. Director of Films (750—1350)	1
4	Dy. Director Songs and Drama (750—1350)	1
5	Asstt. Director of Information (700—1100)	1
6	Film Production Officer (700—1100)	1
7	Asstt. Director Song & Drama (700—1100)	1
8	Information Officers (475—850)	3

Non-Gazetted

9	Professional Asstt. (475-850)	1
10	Asstt. Information Officer (450—850)	2

11	Asstt. Information Officer (340—700)	14
12	Senior Technical Asstt. (340—700)	1
13	Senior Stenographer (340—700)	1
14	Script writers (340—700)	2
15	Photo Librarian (280—520)	1
16	Junior Accountant (280—520)	1
17	Film Librarian (280—520)	1
18	Translators (280—520)	2
19	Field Publicity Asstts. (280—520)	2
20	Information Asstt. (280—520)	1
21	Stenotypist (220—430)	3
22	Katibs (220—430)	3
23	Accounts Clerk (220—430)	9
24	Hindi typist (220—430)	2
25	Reading Room-cum Field Publicity Asstts. (220—430)	11
26	Projector Operator (228-430)	2
27	Drivers (220—430)	2
28	Reading Room Asstts. (170—230)	7
29	Distributors (170—230)	4
30	Orderly (170—230)	1

86



3. Government Presses

With the stepping up of the socio-economic activities of the State, the printing requirement of the various Departments has increased manifold. During the Fourth Plan period an outlay of Rs. 21.00 lakhs was available for the development of two Government Presses but due to foreign exchange difficulties the utilisation is expected to be only about Rs. 17.23 lakhs. In the two Government Presses most of the machinery is old and hand fed which the modern Presses are now casting away for good. A sizeable part of machinery available in the Government Presses is second hand and is very old and worn out and needs being replaced by modern automatic machines.

A comparison of the existing printing budget and the present machinery with that of the year 1950 will show that there is an increase of 500% in the printing budget whereas the increase in machinery is not more than 100%. According to the figures of outturn recorded for 1970-71 in the two Government Presses the position is as under :—

	Srinagar Press	Jammu Press	Total
a) Composing	50640825 ens	76369083 ens	12,009908
b) Printing	24066181	2866500	52731181
	Impersrions	Impressions	Impressions

The work load is increasing every year and the Government Presses are in a difficult position to cope up with the work. The results are obvious. The Government Presses are taking over arrears of work from one year to another. In view of the dire need of the machinery an outlay of Rs. 36.00 lakhs has been kept in the Fifth Plan.

FIFTH PLAN (1974-79)

DEVELOPMENT OF GOVT. PRESSES

Head/Sub-head/Scheme	5th Plan approved outlay		
	Total	Capital	F.E.
1	2	3	4
Development of Govt. Presses	36.00	N.A.	—
Total	36.00	N.A.	—

4. Weights and Measures

The Department of Weights and Measures has made good progress in introducing metric weights and measures in the State and to popularise the scheme amongst the people, especially the business sections by publicity and personal contact.

During the Fourth Five Year an outlay of Rs. 21 lakhs was allocated but utilisation by the end of Fourth Plan is expected to be of the order of Rs. 15.79 lakhs only.

The All India Weights and Measures 6th Conference held in Chandigarh has decided that all expenditure on equipment of laboratories, their housing and transport will be borne by the Government of India and the State Government will bear the expenditure on staff, T. A. and other charges only. In view of this an amount of Rs. 4.00 lakhs only is being provided for the Department of Weights

and Measures for the period of 5th Plan out of the State Plan allocation.

An important feature would be to change over from the traditional measures for cadastral surveys to the metric system during the implementation of land reforms.

Scheme-wise Outlay for the Fifth Plan WEIGHTS & MEASURES

S.No	Head/Sub-head/Scheme	5th Plan approved Outlay		
		Total	Capital	Foreign Exchange
	1	2	3	4
Metric system of				
Weights & Measures		4.00	—	—
Total		4.00	—	—

5. Development of Ladakh & Backward Sections of Population

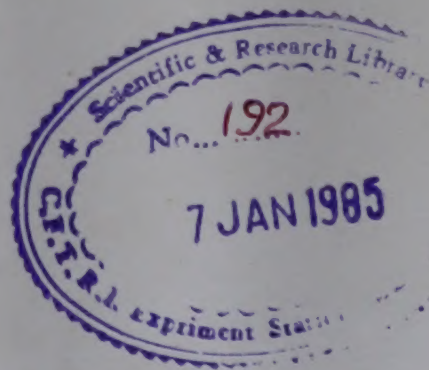
(a) *Development of Ladakh*

Ladakh will continue to be accorded a special treatment in the Fifth Five Year Plan as in the earlier Plans. As against the total Fourth Plan outlay of Rs. 600 lakhs, the provision approved for the Fifth Five Year Plan for Ladakh is of the order of Rs. 1,800 lakhs which is three times the Fourth Plan outlay. This is sharply distinguishable from the State Fourth Plan outlay of Rs. 158 crores, the corresponding outlay for the Fifth Plan being of the order of Rs. 336 crores which is slightly more than double the State Fourth Plan outlay. Detailed schemes to be taken up during the Fifth Plan in Ladakh are being published separately.

(b) *Development of Gojars and Bakerwals*

As indicated in Chapter IV, Gojars and Bakerwals constitute one of the most backward sections of our population. They

are dispersed along the foot-hills of the Kashmir Valley and in the districts of Poonch, Rajouri, Doda and partly in the districts of Kathua and Udhampur. Rs. 1,000 lakhs have been set apart for the Fifth Plan period for the development of this community in the five identified zones of Kashmir Valley out of which Rs. 50 lakhs have been earmarked for the areas outside these zones to boost programmes mainly in the sectors of Animal Husbandry, Sheep Breeding and Pasture Development. The five zones of the Kashmir Valley will additionally receive Rs. 78 lakhs under rural water supply programmes from the outlays meant for general programmes of development. It is not, however, possible to quantify at this stage the size of benefits which will be shared by the Gojars and Bakerwals of other areas, from the outlays earmarked for specially backward areas where they pre-dominate. Detailed programmes for the development of Gojars and Bakerwals are, however, being published separately.



C.F.T.R.I. LIBRARY, MYSORE-13

Acc.No. 192

Call No.

Please return this publication on or before the last DUE
DATE stamped below to avoid incurring overdue charges.

<i>Due date</i>	<i>Return Date</i>	<i>Due Date</i>	<i>Return Date</i>



GOVERNMENT PRESS SRINAGAR